

T H E

English Gardner:

Or, a sure Guide to Young
PLANTERS & GARDNERS.

In Three Parts.

- I. Shewing the way and order of Planting and raising all sorts of Stocks, Fruit-Trees, and Shrubs, with the divers ways of Ingrafting and Inoculating in their several Seasons, Ordering and Preservation.
- II. How to order the Kitchen-Garden, for all sorts of Herbs, Roots, and Sallads.
- III. The ordering of the Garden of Pleasure, with variety of Knots, and Wilderness-work after the best fashion, all cut in Copper-Plates; also the Choicest and most Approved ways for the raising all sorts of Flowers, and their Seasons, with Directions concerning Arbors, and Hedges in Gardens; with Ordering the Green-House or Conservatory, in preserving choice Shrubs, Flowers, and Plants, in the Extreamest Seasons, making Fire-Stoves, Watering, and what is to be done in every Month through the Year, in the Orchard, Garden, &c.

Fitted for the Use of all such as delight in Gardning whereby the meanest capacity need not doubt of success.

By *Leonard Meager*, above Thirty Years a Practitioner in the Art
of GARDNING.

The Ninth Edition, with large Additions.

London, Printed by *J. Dawks*, for *M. Wotton* at the Three Daggers in Fleet-street, and *G. Conyers* at the Golden Ring in Little Britain, 1699.

To the Worshipful
Philip Hollman

O F

WARKWORTH in the County
of **NORTHAMPTON**, Esq; Grace,
Mercy, and Peace be Multiplied.

Worshipful Sir,

IT hath been heretofore accounted a happiness to do something that was worthy to be Written, or to write something that was worthy the Reading; and although I have not attained any of those two, yet, I doubt not to say, I have in the following Tract writ something that is worthy to be Practised; although by those that are of the lower Orb. Sir, I have many Years since had the advantage and opportunity, in your Worship's Service, to Study and Practise the Art of *Planting*, *Grafting* and *Gardning*, to which I was naturally inclin'd; as also being in some measure countenanced and assisted by your Worship, as indeed you did all your other Servants that had any inclination or endeavour to the Practise of good Husbandry; as also having found your Worship rather as an Indul-

The Epistle Dedicatory.

gent Father, than a Master to me. I being thus obliged to your Worship, in token of thankfulness, I have presented this Tract of the Art of *Planting, Grafting and Gardning*; being very plain, but yet sure and full directions to all the aforesaid purposes, desiring your acceptance, together with your Countenance and Protection; for if I may be my own Judge, the Tract is performed with so much Sincerity and Exactness, that I hope your Worship will have no cause of being ashamed to own the Protection of it. Thus begging pardon for my boldness, I rest,

Your Worships

most Humble Servant,

Leonard Meager.

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TO THE READER.

Friendly Reader,

I Having seen divers Books pretending to the Art of Gardning and Planting, and observing the most of them very much to fall short of sure and particular Rules to the purpose, whereby a learner might benefit himself. I having a Talent to improve, thought by this undertaking I might advance it, and breaking through the many difficulties that lay in my way, especially want of time, being always necessitated through Labour and multiplicity of Business, together with the want of Learning, whereby such a business might be made more acceptable, (or at least less contemptible) at last I arrived to what I here have presented to your view, namely the three principal parts of Gardning, comprehending both Profit and Pleasure, that is to say, the Art of Planting and Grafting, &c. and raising all sorts of Stooks and Fruit-bearing Shrubs and Trees, with their Seasons, Ordering and Husbandring from the first to the last. Also the Art of Kitchen Gardning, both for the raising of all useful Sallets, Herbs and Roots, for the Kitchen, with their Preservation and Husbandry fully set down. And lastly, the ordering of the Garden of Pleasure, with several forms of Knots, Plat-forms, and Wilderness-work, &c. the ordering of all sorts of Flowers, also a little concerning Arbors and Hedges in Gardens.

To the Reader.

Gardens with some other things very useful for all sorts to be acquainted with, that have to do with Gardens and Flowers. All which I have set down very plainly without any deceitful Dress and unnecessary Flourishes, whereby it may become very useful for all sorts of Practitioners, yea though of very weak capacities. I believe had I been as slight in my Rules or Directions, as many before me have been, I might have passed the more quietly; but being otherwise, I must expect the snarls at least of covetous self-ended, --- What faults or mistakes there may happen to be in the Tract, I can assure you is not wilful, and shall upon Information be ready to amend them.

L. M.

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THE English Gardener.

Of the Order and Manner of raising all sorts of Fruit-Trees, with the several ways of Grafting, Inoculating, Planting, Pruning, and Husbanding them upon all Occasions. And First, of the raising all sorts of Stocks for the aforesaid purpose: together with the several Seasons for every necessary business therein.

IN the choice of ground to plant a Nursery of Fruit-Trees upon, let it be such as is of a plyable nature to be wrought upon, not subject to the extreames either of wet or driness, neither very stony or gravelly, nor a strong and clammy Clay, which is of a cold nature, and requires much labour to work upon it; and besides, is apt to convert what Manure you bestow upon it into its own nature in a short time, without continued supply. The best Soil for such a ground, and those that come near to it, is store of Chalk, Coal, or Buck-ashes, with the dung you bestow on it, which will cause it to work better, and be one means to prevent chopping and cleaving, which this natur'd ground is subject unto in dry weather. A wet ground may be helped by Drains, Ditches, or Ponds, being discreetly contriv'd, as also by laying your Beds, or Quarters pretty high and rising into the middle, the better to shoot off the water. And the same sorts of dung and soil will be fit for this kind of ground as well as for the former. A coarse Gravel is altogether unfit for this employment, except you change the nature of it, by raising it of such a thickness as may make it for your purpose, with any sort of Earth which is apt to be wrought upon, and may yield nourishment to what you plant thereon. Also if your ground be very stony, your best way will be to dig and pick out what stones you

can, at least the biggest, and to make a supply either of Dung or Earth, that you may have at least a full Spit deep of Earth to work upon, (the more the better.) Other sorts of course grounds there are, that by labour and cost may be made capable of bringing forth Trees to good purpose. But I forbear to speak farther of them a present, only take notice, that the best of sorts of ground for you purpose, to plant, or make Gardens upon, are a fine sandy Loam or a fat Sand, or a short brittle Loam, or Brick-earth, or any good thorow Mould, be the colour what it will. The Truth is, every man cannot have what is best for his purpose, and therefore must endeavour to supply the defect with good Husbandry.

Of preparing the Ground, and sowing the Kernels and Stones of Fruit, either of Pears, Apples, or Crabs, &c.

HAVING made choice of a piece of ground, whereton to raise your Stocks, the first thing you are to do, is to dig it very exactly, or stock it with a Mattax, if occasion require, and cleanse it diligently from all roots, weeds and stones, that may hinder the thriving of your Stocks, especially from Couch or Twitch-grass, Nettles, or any other offensive Weeds that are not easily destroyed by ordinary hand-weeding. But if it be a ground that hath been very much over-run with bad weeds, as Twitch-grass, &c. it will be your best way to dig it over a second time before you sow it, for it is a very hard thing to cleanse such a ground with once digging. Your ground being digged and cleansed, and well enricht (for the heartier it is, the quicker will your profit be) then tread out one Bed or more, according as the quantity of Stones or kernels you intend to sow, require, either of the stampings or pressings of Crabs, where Verjuice is made, or of Apples or Pears, where Cyder or Perry is made, or the Kernels of Apples or Pears, saved from Fruit otherwise: but for my part, I do like the Stocks of Crabs and wild Pears better for a Nursery, and to graft on, than those that are raised from better Fruits, altho' these last indeed do shoot more clear, and come faster forward in stock, but the other are more hardy, and ordinarily make the better Tree, (yet the other may do well.) You must sift your Mould from the coarsest of the Dress, that you may the better discern how thick or thin to sow them: be sure to sow them in an indifferent manner, not too thick, lest they starve one another, nor too thin, lest they answer not your labour and cost, by reason of their small number, and besides, what is wanting

in your intended Crop, will be made up in Weeds; therefore endeavour to keep a Mean: then cover them about two inches thick with fine Mould, having a care you leave none uncovered, lest the Mice take your Bed; and disappoint you of your Crop. After this manner you may sow Cherry-stones, as I have often done with good success; or you may prick out your Kernels or Cherry-stones one by one, about two or three inches or more asunder, they will come on faster, and save a year or more. Thus may you do with the Stones of Plums, Peaches, Walnuts, &c. only setting them somewhat farther asunder. You may likewise set Nuts or Filberds, also sweet-Bryar, (But in sowing sweet-Bryar, and other such like, you must bruise the Berries between your hands, which is the surest way.) Acorns, Ashen Keys, Sicamores, Haws, or the Seeds or Kernels of any other kinds of Shrubs or Trees. The Season when this work is to be done, is any time from the beginning of *September* till *Christmas*, or sooner, according to the time when every sort is ripe, only Chesnuts must not be set so soon, but rather towards the end of *February*, or thereabouts, for the Frost is apt to kill them also. The Stones of Apricocks are apt to Spring too forward, and so subject to miscarry by the Frosts coming on them, being tender. Yet some do use another order or fashion with their stones and kernels of all sorts, which is keeping them in Earth in Tubs, or such like materials; and then in *February*, having prepared the ground, they sow them in Trenches, in like manner as Pease are sown, only the Rows are nearer together. You must take care that they do not spire too much before you sow them, and sow not too thick. The truth is, I have practised this way of keeping the stones of Peaches, and such like, until the Spring, and then set them out about half a foot asunder, or more, in good Earth; those that did not chip, I did crack, and set the kernels. Observe that they are to be kept in the house in some Cellar, or other convenient place, until your season comes, keeping them covered from the Mice. Also take notice, that if your Peach-stones be put into earth any thing early, and the earth moist or damp, they will be somewhat apt to sprout early, and therefore must be set out betimes. But this inconvenience happeneth, if it prove wet and cold; your tender sprouted Peaches or Apricocks are subject to rot and come to nothing, except you defend them from the foresaid inconveniencies. Another way I have used also with good success, which is, to keep my Peach-stones in an ordinary way without earth, till the next Spring, and then crackling them by setting them edge-long upon some hard thing, after that, laying them

in some convenient place, with a laying of mold, and a laying of kernels, so keeping them from overmuch moisture, but giving them all the advantage of the Sun, in which case a little moisture was requisite; and when they were well sprouted, the weather being moderately dry, I set them in their order, some will spire a month or two before others: I have set them out in May, which have been fit to inoculate the same Summer. That which comes next to be lookt after, is the keeping them clean from weeds at all times, which, if suffered to grow to any bigness, will starve your Stocks; besides you can scarce pull up a great weed, unless you pluck up your young Stocks with it. Take notice, that if you have the stones or kernels of any choice fruit, of which you desire to have fruit quickly, then take some buds even of the same years growth, if of a Peach or Nectarin, and inoculate on some convenient Stock; or if of other fruit, you may bring it to pass the second year at farthest, and so have your desire.

Of the Season and Order of Planting out of young Stocks.

After your Stocks are of two years growth, or after the first year, if they have thriven lustily, you may take up the forwardest, or all of them if you please; but usually a Bed of Stocks that is sown indifferently thick, will yield a supply of Stocks for three or four years drawing, if you first take only the biggest and most thriving, suffering the rest to grow bigger. And now having prepared a piece of ground, which ought to be well dug, and enriched with good rotten dung or soil, then sort out your Stocks; those that have good spreading roots, cut the ends of every root pretty near, and the tops within seven or eight inches of the root, unless you desire to leave some of the straightest, to run up to ingraft or inoculate, about standard or heading height, and then where you intend to plant them range a Line, and plant them in order seven or eight inches distant one from another, allowing three or four foot between every range of Stocks, or more, if you desire to sow any Herbage between, as Carrots, Onions, &c. if not, three foot will wide enough. But as for those Stocks that run with a downward right, or a tap root, top them as the former, and cut maid dead off their down-right root, and then in a Bed prepared, range your Line, and set them in order, somewhat chicker both in rank and file, with a stick, such as we use to set Beans with, which is a quicker way than with your spade; before you forget not to close the earth to the roots: so let them rest till they have got some good spreading roots, w

Then you may plant them out where they may be grafted, which may be after two years growth. You will find a great difference between a Tree that is planted shallow, and hath spreading roots, and one that hath a tap root, or is planted too deep: the shallow hath ordinarily the best ground, and the influence of the Heavens doth operate more speedily and effectually, which causeth Trees to bear fruit best and quickest. And thus you may do with the suckers of any kind, either of Pears, Plums, Cherries, &c. of which in a little time you may make a good improvement: After two years growth you may graft or inoculate many of them in case they thrive well. It will be your best way to let your Stocks for Pears or Apples be pretty lusty before you graft them, that then they may be able to shoot high enough the first year for their heading height. I have often found it inconvenient to graft stocks too weak; though I know some will graft them the same year they were planted. Indeed it may so chance amongst many, some few may have some indifferent shoots; but I know, had they stayed two years, they would have been as forward and handsomer Trees. Besides, there be several sorts of Fruits, such as Pairmains, Winter-Queenings, Julyflower Apples, &c. that will not make a Tree worth your labour, if the Stock be not very lusty before you graft them, they do naturally shoot so weakly and crooked. Thus it is with divers sorts of Pears, of which the Warden is one of the worst to make a handsome graceful Tree of. Observe this for certain, that generally those Stocks which have been raised from the Stone or Kernel, have better Roots than those raised from Suckers, after they have been once planted, and the Tap-root cut pretty short. The next thing to be considered, is the Season when this work of planting is to be performed, which is from the end of September to the end of February, or a little later, if occasion require: but if the Season be very dry, or the Sap very high, as it is sometimes at that time of the year, in many sorts of stocks and trees that are not thriving, stay till the ground be well moistened, and then your stocks will rise with less labour and better roots, not being so apt to break; or you may stay till the sap be a little more hardened: but if not, I know no inconvenience in it, being you are to cut off the greatest part of your stock. You may know your stocks or trees have done growing for that season, if your stock appear blunt, or only having a bud at the top; but on the contrary, if there be very small and fresh leaves, then the tree is yet growing. In taking the head of the season to plant your Trees, they will have taken new roots before the ground be
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 ybsar much.

much chilled and cooled with wet and cold weather, and thereby will take root the sooner. and so the trees will be the better prepared to shoot with the first, which is oft-times as good as a year saved, they being free from miscarriage in case of a very dry spring, which many times destroys such trees as are late planted. Take notice that Snow is as great an enemy to Trees as any thing (in case it lye long on the roots when they are taken up.) Also drying Winds are very bad.

These things following are apt to grow of Cuttings or Slips.

As	
Codlings,	Gooseberries,
Genesings,	Currants,
Breys,	Figs,
Some sorts of Sweet-	Vines,
ings.	Tamarisk,
Genet-Moyles,	Roses in some Grounds,
Quinces,	Honey-Suckles.

By laying almost any sort of Trees or Shrubs will grow, if a little Incision be made, as, I shall mention afterward.

As	
Mulberries,	Lime-trees,
Cornelions, sometimes of	Gilder-Roses, &c.
Slips.	Roses of all sorts.

The season for setting of the cutting of Trees to grow, is the same with planting of Fruit-trees; from the fall of the leaf, to the end of February.

The season to increase Trees, and by laying, is any time, either Spring, Summer, or Winter; but by laying in the Spring or Summer, they may be fit to take off, and plant the Winter following.

Of the Order and Manner of Grafting, and first of the necessary Tools for that purpose.

THAT you may proceed orderly, you are to furnish your self with a fine small Saw, that is well-set and sharp; also a good strong Pruning Knife, being made a very little coming, which will be very ready

ready to cut off Heads of your Stocks which you intend to Graft, if they be not too big; but some use a kind of drawing Knife for that purpose, and is a little quicker than a Saw; also a good ordinary midling Knife to cleave your Stocks, as also to cut your Cyons, if it be not very good, or else another only for that purpose, which must be kept very sharp, therefore you are to have a Whetstone to quicken your Knives, as occasion requires; also a stick of a foot or nine inches long, made of a piece of an old spade or shovel handle, or some other hard Wood to use in the stead of a Mallet to drive your Knife when you cleave your stock; it is more convenient and handfom for the purpose, as also an Iron Tool about an handful in length, or little more, made turning at each end about an inch and an half, if it be steel'd at either end it will be the better, and not so apt to bend when you hold open a strong Stock, those ends are to be made flat a little like a Chizel, but not above half an inch broad at most, only pretty strong; if you will, one end may be pretty small for smaller Stocks, the other bigger, and the use of it is to hold open your Stock till you have set your Graft or Cyon in its place; the shape of this and the other Tools are presented to your view. Also in case you have any strong or stubborn Stocks that are apt to pinch your Cyon too hard, you are to have some small chips, or sticks cut wedge-fashion, to keep your Stock from pinching your Graft too hard. Also you are to prepare a quantity of Clay or Loam, which ought to be very well tempered, either with pretty store of Hay or Stable-litter chopt small, if it be not very well tempered and wrought together, it will be apt to fall from your Graft in case of much wet, or chop or cleave in case of dry Weather.

The next thing you are to take notice of is, what Stocks are fittest for each sort or kind of Fruit to be grafted upon; Know therefore that the Crab or Wilding stocks are the fittest and best to graft any sort of Pippins or Apples upon, altho' some are of another Judgment, and think that those Stocks that are raised of the Kernels of good Apples are better. But I have had cause to judge otherwise, although as I said formerly, some sorts of them will grow more free or gale, and be fit for use sooner: but the Stocks of some sorts of sweetings are very bad, because they never making a considerable Tree for stature, are exceeding apt to send forth Suckers from the Root. Likewise the Stock of wild Pears, either of Kernels or Suckers, is the best to graft any sort of Pears upon or Medlars, the white Bush is likewise good to graft Medlars upon, and sometimes Pears; but

but if they be not grafted very near the ground, the Graft will out-grow the Stock, and make a very unhandſom Tree; Pears are alſo grafted upon Quince-ſtocks, and are good for ſuch Trees as are to be planted againſt a Wall, becauſe they do not uſually make ſo great a Tree as a Pear-ſtock; Medlars may likewiſe be budded or grafted upon the Quince-ſtock; but to Graft Pears upon Apples, or Apples upon Pears, I could never find it worth my labour: Alſo the wild black or Honey Cherry ſtocks are beſt to Graft or Inoculate any kind of Cherry upon, whether they be of Suckers, or ſown of the Cherry-ſtones: alſo the ordinary wild *English* Cherry-ſtocks are good to graft any ſort of good Cherry upon, but they are beſt for Wall or Dwarf Trees, and moſt fit for ſome ſorts of great leav'd Cherries, which are apt to run much to Wood, and bear but little, their greateſt fault is to abound with Suckers. Alſo Plum-ſtocks of divers ſorts, eſpecially the White, Black, and Red Pear-plum, alſo the Red Damascen, with ſeveral other ſorts or fit Stocks for any ſort of Aprecocks, Peaches, Nectarins, or for any ſort of good Plum, alſo the Stocks raiſed from the Stones or Kernels of Peaches or Nectarins, are very good to bud any ſort of Peaches or Nectarins on, they will likewiſe bear Fruit of themſelves according to their kind they came of, although ſome will vary ſomething, as indeed it is uſual in all ſorts of Fruits, of which there are divers kinds, to bring variety from their Stones or Kernels, being ſet, although ſome kinds of Airs and Grounds are more apt to produce variety than others, as appears by the many new ſorts, eſpecially of Peaches, Nectarins, or Pears that are brought us from Foreign Parts, chiefly from *France*. Plums grafted on Cherries, or Cherries on Plums do not agree. I Confeſs I have had them take well and thrive for one year, and then dye. So they that deſire Practice for Recreation, may inoculate one ſort of Currant upon another, and have both Red and White upon the ſame Tree; So likewiſe Goosberries, Filberds, or the great ſort of Nut upon the common Hazel, &c. as I have made Trial.

Being furniſhed with Tools, &c. you are to cut ſuch Cyons as are ſuitable for your Stock, not too ſmall or weak, neither very big, alſo ſuch as are of the laſt ſhoots, ſee that they have Buds, for ſome ſhoots which grow within the Tree immediately from the Body, may be of a fit Scanling for your purpoſe, and yet have no Buds, or at leaſt ſo ſmall and backward, that they will do you no ſervice: ſome in cutting their Cyons do take an inch or two of the Old, or former

former years Wood ; but for my part, I never do it, but when I cannot speed, or furnish my self otherwise, and in such a case I have made use of such as have been part of three years shoot. Then you may proceed as followeth ; first, with your strongest Knife or Saw cut off the Head of your Stock at a fit height where you would have your Tree to head, or which is better, within half a foot or less of the ground, if your Stock be not too big, and then pare the top of the Stock smooth ; and if you put but one Cyon in, which usually is the best way, then you are to cut off a piece with aslope cut, about an inch and half deep on the worst side of your Stock, putting your Graft on the smoothest and straitest side, in cutting your Stocks thus, it will cover over the sooner ; then take your Cyon, which ought to be as the last shoot, it matters not for a joint of the former years growth, unless it be too short, for the straighter and smoother your cutting is, the more exact it may fit it to your Stock, especially if your Stock be young and have a thin sap : (I do not deny but Grafting at a Joint (as it is commonly call'd) may do well, if the Stock have a thick sap, as commonly all your Wood Stocks have) then with your Knife being very sharp, cut your Cyon or Graft with a slope cut about an inch and an half more or less, according to the strength of your Stock and Graft ; first, on the one side, and then on the other, making it for shape like a Wedge, very smooth and even, that it may join close all along, only that side of your cutting that is to stand outmost in your Stock, must be left a little thicker than the other, otherwise your Graft cannot join so exactly with the sap as it ought, if your cuttings be long, you may make two or three Cyons of one, leaving four or five Buds to a Cyon ; then take your Knife and place it even on the middle of the head of the Stock, and with your stick before mentioned, in the stead of a Mallet drive your Knife a little way into your Stock, then raise your hand, and sink the point of your Knife sloping on the edge or back of your Stock, or side-ways ; cleave your Stock of such a depth only, as you make way for your Graft, on very little more, by this Order your Stock will be cleft more smooth, and handson, and even, and not cleave cross nor ragged, as sometimes small Stocks are apt to do, and then your Instrument or Grafting-Chizel being driven into the cleft of your Stock a little way, you may hold the cleft open until you have placed your Graft, the which must be set exactly sap to sap ; and if your Stock be young, and hath a very thin sap, then there is required more exactness and circumspection in every part of the work : if your Stock have a thick sap, you may place your Graft

a little more in, yet so that the edge of your Graft may be even with the sap, which is the main in the business. Having placed your Graft, you are gently to take away, or knock out your Grafting-Chisel without misplacing your Graft, and then with a handful, either more or less, of your tempered Clay, as the size of the Stock requires; lay upon the head of your Stock about an inch above, and something lower than the cleft of your stock went; smooth your Clay round and handson, that it may stick on, and keep out both Wet and Wind. I have known when Clay hath not been well tempered, a hasty shower hath waishd off all again within a day or two, much to the prejudice of the Grafts: if you put two Grafts in a Stock, you must cleave both sides of your Stock smooth by raising and sinking your hand, whereby you may cut the Bark smooth as you go; also if your Stocks are as big as a Man's Wrist, you are to cleave your Stock twice, not cross, but both overthwart, and put in four Grafts or Cyons, but if your Stock be

too big to cleave, then you may graft them in the sap as shall be shewed afterwards. Some do cut their Cyons with shoulders, the which I seldom do, unless my Graft be too big for my Stock, but being done handson, it may occasion the covering of the Stock the sooner. Yet the former way will do well enough, and cover the sooner, if the contrary side of your Stock be taken off with a good slope cut; take notice that your Cyons of Plums and Cherries must not be cut so thin as Pears and Apples may, especially your great leaved Cherries, as Hearts, &c. because of the great Pith they have; the truth is, Budding, or Inoculating, and Whip-Grafting is fittest and best for all choice sorts of Cherries. The Season for this work of Grafting is from *January* to the end of *March*: sometimes I have Grafted both sooner and later, even in *May*, but you must take notice my Cuttings have been cut betimes, and buried all over in the ground to keep them backward, otherwise your labour will come to nothing. Remember that all early Blooming Fruit ought to be grafted a Month before Apples at the least.

Admiration

Another manner of Grafting, call'd Whip-grafting, as followeth, to be practised only upon small Stocks.

YOU are to be provided of such Grafts or Cyons as are pretty gule and streight, of a suitable growth and substance with your Stocks, at least with the place whereabout you would graft them, then make choice of a streight place on your Stock, and cut off the head of it, (at such a height and place as you can answer with your Cyon) with a slope cut about an inch and an half in length, more or less, as occasion requires; then take your Cyon and cut it with the like slope cut on that side as will best answer your Stock, and of the same length, that it may answer as exactly, if possible, as if it had been cut off from the same place before, so as to answer sap to sap, without which you can expect no success: * some after they have fitted Stock and Graft, do give both Stock and Graft a little notch or slit to make them to stick or hang together whilst they prepare their Bass, and then wind their Bass about it to keep them both even and close, putting some Clay about it, and so let it rest until it be well closed, but it may be perform'd sufficiently without the notches, as I have often done; and then about Midsummer, or sooner, as you may know by their thriving, you must untie them, otherwise it will gird them so that the Wind will be apt to break them off when the top groweth any thing big; it is a good way if you find they have been pent or girt over much, to tie them again for a little time, otherwise they may be apt to crack where they were joined, by reason of their sudden liberty after their being so hard pent, which sometimes make a fault: The season is the same with other Grafting, according to the kinds of Fruits.

* The length of your Graft is as much as in other Grafting.

Another way of Grafting a little different from the former, and is for small Stocks, but yet of a little bigger size than the former.

First, cut off the top of your Stock even at the top, at what height you please, then make those of your Graft not very small, and cut one side only of it with a slope cut, as in the former way of Grafting, about an inch or more, as the strength of your Graft will bear; if you will, you may give it a cross cut like a shoulder, only the depth of the Bark or Sap, very little more, that it

may a little rest on the top of the Stock, and be careful to cut your Graft very smooth, that it may fit and join exactly on your Stock; then make choice of that side of your Stock that will suit best with your Graft for straitness, then lay the cut part of your Graft against that part of your Stock where you desire or intend to join it, and measure the length of it, and with a sharp Knife cut or slice off so much of the Bark only, as the breadth and length of the cut of your Cyon or Graft contains, and then place it so exactly, as if it had been cut from the same place; then bind them together with some Bass, and Clay it as you do other Grafts, letting it rest until it be well taken, and then you may untie it, for the same reason with the former.

Another manner of Grafting, to be perform'd only upon such Trees, which for the most part are too big to Cleave and Graft in the Clefts.

THE way of it is, first to cut off the head of your Tree you would graft at a convenient height for heading, not very low, if it exceed the thickness of a Man's Arm; then pare the top of it smooth; then prepare your Grafts, cutting them only on one side with a slope cut about an inch or more in length, and then taking off a little of the Bark, only on the other side; and if your Grafts are any thing gale or thick, you may cut them with a shoulder on that side which most, and then with a wedge of Iron, or of hard Wood made is to be placed next the Wood, which is that side which is cut of the shape of your Grafts that are to be set on your Tree, or rather an Instrument of the shape expressed in the foregoing Plate, the turning end of it which is to make way for your Graft, to be made and fashioned after the form of your Graft as it is cut; the side of it, that is to go next the wood flat, being the fore-part of it, the other a very little round, rather inclining to flat, let it want something of a quarter of an inch in thickness, in the thickest or upper part, except you make it a pretty deal longer than you need, to drive in to make way for your Cyon; having your Cyons ready, you shall first with your Knife make a little shallow cut or small scratch, that the Bark may the better yield or give way without breaking asunder, and then just against your cut or scratch on the Bark, you are gently to drive in your Instrument between the Wood and the Bark, of such a depth as may make way for your Graft, then beat out your Instrument, and thrust in your Graft as low or deep as it is cut, and when you have put in as many Grafts as you think convenient, you must lay a sufficient quantity of well-tempered Clay, to keep out Wind

Wind and Water, raising your Clay high on the top, that the wet do not get in and spoil your labour; this way of Grafting is very apt to take and thrive, but are oft subject to be broken off with the Wind, chiefly when the Bark is cut or broken quite open, which with care may be prevented; the danger off-breaking off with the Wind may be prevented by fastning a stick or two to the body of your Tree, and then tying your Grafts thereto, beginning to tie them before they have got too great a head, &c. to have a care of them for the first two years after, by which time they may be past that inconvenience; sometimes when a stock hath not been very big, I have put two Cyons in the cleft, and two in the sap, and hath been a good way both easie and sure; a little practice will inform your judgment more than I can tell well how to express, both in this and other the like practises. (The Season is when the sap begins to be a little stirring, the Bark will give way the easier.) Other forms of grafting there are used, which I forbear to relate; these being both easie and sufficient, only one form more I had almost forgot, which is useful for several sorts of Fruits, and choice Flowering Trees or Shrubs: and is as followeth.

Another manner or way of Grafting, call'd Inarching.

HAVING a sort of Fruit or other choice Tree, or flowering Shrub that is tender or hard to propagate by the more ordinary ways, (otherwise it is not worth the trouble) and there be Stocks of a suitable nature growing near accidentally, or planted purposely about it; your Stocks being of a sufficient size and growth for the purpose, make choice of a convenient Branch, either of the last years, or two years growth; as also of such a height on your Stock, as may be best both for the size of your Tree, and the convenient joining of both Stock and Branch; then cut off the head of your Stock, and on the most convenient side for your purpose, cut a notch just against the middle of the head about an inch or two in length, from the head downward, and the depth as the thickness of your Cyon will necessarily require, or in the stead of cutting a notch, you may cleave your Stock, chiefly on the side where your branch is to be fixt or placed; but first, you are to prepare your Graft by cutting it in such a form as may fit either the notch or cleft, not cutting your branch off; you may cut it either with shoulders or without, leaving that side thickest that is to stand outmost on your Stock, and then fix it exactly sap to sap, as in other Graftings, with-

without which no Graft can take; then tie it with some Bass, that it may not start or slip out of its place, and then with well tempered mortar or wax wrap it well, that no Wind or Rain get in to spoil your Graft.

Another way for this kind of Grafting is, that in the stead of either notching or cleaving your Stock, slice or pare off a piece of the Bark, and a little of the Wood only on that side which is best for your purpose, about an inch or more, and then cut off only so much of the Bark from the convenient side of your Stock, as the cut on your branch will exactly fit, neither wider nor narrower, but as exact as if it had been cut from the same place; if you will, you may let them into another with a slit on the Stock, and Graft, as in Whip-grafting, and then tie them close together, and either wax or clay it as aforesaid, and so let it rest until it be well taken, and shoot pretty well, and then untie your Graft, lest it should gird and occasion it to break off with the Wind, you may if you will, tie it again gently, and clay it if you will, and so let it rest until it hath had the years shoot, and then you may cut off the branch close at the lower end, and bestow your Tree as you please, and by this means you may have a bearing Tree the same year of its grafting. The Season is the same with other Graftings, as the kind of Fruit is earlier or later.

Another way of propagating, or increasing of Fruit-Trees.

Although this is no kind of Grafting, yet by the practice of it good sorts of Fruits may be encreased, and to that end, having a Fruit-tree you desire to encrease more of the kind, about *Midsummer*, sometimes a little sooner, as also later, whilst the sap is very high, which in some Trees or Fruit is earlier, in some later; make choice of a convenient branch or shoot of an indifferent size, not very big, and a little above the place from whence it springeth, or where you see most convenient, apply a pretty quantity of well-tempered mortar round about, and make such provision with convenient tying, that the mortar do not fall off either by the washing of the Rain, or otherwise; and so form your Clay on the top of it, that it may a little receive and retain moisture in case of Rain, or otherwise; and then cut the Bark off round about under the place where the Clay is, about two or three inches wide; you may cut the Bark round in two places, and peel it off with ease, and in the clay

clay or mortar it will either put forth root, or prepare it so for rooting, that being cut off about the beginning of the planting season, it will grow, which sometimes is very good about the end of *September*, (and sometimes the beginning of *September*, for many sorts of Fruit-trees) but if the Sap be very high, and in a growing posture, as sometimes it is, you may stay longer, especially if it prove very dry Weather, you must proportion your Plant with discretion, not leaving too much for your young root to feed, lest you loose your Plant and labour both; and thus any who delight in these kinds of exercises, may increase good Fruits naturally; if you plant early, and the ground something dry, it will be the surest way to keep your Plant moist at the root, especially at the first planting.

Another form of Grafting I should have mentioned before, but forgot; it is, or may be call'd Notch-Grafting; it is best practis'd on small Stocks; the manner is, if it be very small, as about the bigness of a Man's little Finger, or thereabout, cut off the top smooth, and then instead of cleaving your Stock, cut a deep notch with a very sharp Knife about an inch or less, if the Stock be very small, and then cut your Cyon fit for it, placing it exactly sap to sap; if your Cyon doth answer the size of the Stock, you may fit it exactly on both sides, if not, you may slope off the contrary side of your Stock; also if your stock have substance enough, you need not cut your notch quite through on both sides; you may cut your Cyon with shoulders or without, as you like best; shoulders may seem to cover the head soonest; after you have plac'd your Cyon, you are to tie it with a little bass, and then cover it with well tempered clay or wax, as in other Graftings, not forgetting to untie your bass when it begins to thrive well.

Of the way and manner of Inoculating.

THE which is the taking off a Bud from one Tree, and putting it between the Bark and the Wood of another Tree or Stock, the end is the same with other ways of Grafting, and moreover by this way, divers sorts of Fruit which are not apt to take or grow by ordinary ways of Grafting, are by this easily increased; and therefore to this purpose, you are to be provided of a good sharp Knife something bigger than an ordinary Pen-knife, being made flat at the end of the hant like a small wedge about an inch in length or a little more, and about half an inch in breadth or less, made thin and taper,

taper, with an edge as it were at the end; the use of it is to open and raise the bark of your stock within, in which you are to put your bud; also some Quills, some bigger and some less, cut after the fashion of a Gouge, as it is expressed in the first Plate, or else some Tools made of the same shape of three or four sizes, some bigger, some less, made of Steel, very thin and shallow, from the size of a good Goose-quill, to the size of a Crows-quill, which may pretty well fit with the several sizes of shoots you may have occasion to make use of in your practice: yet I am not ignorant that there are divers who use this Art, and do use neither Quills, nor any flat end as is mentioned at the Knives haft end, but only a sharp Knife with a slope point to open the Bark, their manner I shall mention anon; the season for inoculating, is from the beginning of *June*, to the end of *July*, sometimes a little sooner upon some occasions, but very often for Roses and natural Peach-stocks, &c. till *September*; however it is the free running of the Sap that is the sure Rule to go by, as also the strength or fitness of the Bud, which sometimes is not of sufficient growth, when notwithstanding the Stocks will rise well enough: being provided with Tools, Stocks, and Fruit of a suitable nature, to take up your Stocks, and the Season fitting, you are to make choice of such shoots as are of the same Years growth, whose Buds are pretty forward, easily discerned behind the leaf, (otherwise you may lose your labour, although the Shield or Scutcheon do take) then cut off the leaf, leaving only the Stalk, or but little of the leaf, lest it should be troublesome; but it is no ways useful as to the growing of your bud, the stalk may be a little useful to hold by, but may be spared without prejudice; some do approve only of those Buds that have one single leaf only; but for my part, I usually make use of those with two or three leaves, as well as of any other, if the bud be not too forward, only I do refuse a few of the lowermost buds, which oft are blossom buds, (except in young Trees that are not bearing) then go to your Stock, and prune only so much as may make way to do your work in the most convenient place of it, (much pruning doth oft occasion your bud to spring the same Summer, which is not convenient, it oft doth blast in the Winter, at the best it doth not make so fair a shoot as those that spring the next Season) then begin at the lowest or biggest end of your branch or cutting, and cut the Bark only with a cross cut about half an inch below the bud you intend to use more or less, as your branch is in strength, and then with your Knife cut off your bud with the bark, and a little wood, as much above your bud as the cross cut

was

was under it, beginning your cut above your bud, and then the form of it will be like a Scutcheon or Shield turned upside downward; then take your Shield or Bud between your Thumb and Fore-finger of your left Hand, with the Bud next your Fore-finger, the Wood next your Thumb, your Finger close under your Stalk or Bud, then with your Quill or Gouge shaped as aforesaid, and as it is here expressed in the first Plate; thrust it between the Wood and the Bark, taking the Bud and Bark clean from the Wood, which is of no farther use; and be sure there be no hole in the inside your Shield, especially against the Bud, if there be, your Shield is of no use, the principal for growing being wanting; and therefore to slight that and take another, observing the former Rules, and then make choice of a smooth place of your Stock, at such a height as is most fit for your purpose, whether for Wall or Standard, and then with your Knife make an over-thwart cut on your Stock the depth of the Bark only, and then from the middle of that over-thwart cut upward, make another cut of the length of your Shield or Scutcheon, the depth of the Bark only; sometimes the cutting into the Wood occasions it to gum and spoil your Bud; the shape of those cuts will be like a Roman T turned upside down, and then with the flat end of your Knife, **L**hast made for the purpose, thrust it between the cut, and raise the Bark on each side so wide as for the Shield or Bud to lie flat and plain, and be careful after you have made entrance between the Bark, that you bear up your Hand or Tool towards the Bark, so as not to rub or gall the Sap next the Wood, which should take with your Bud; then hold open the Bark at the lower end, and put in the taper or picked end of your Bud, and draw it just even with the over-thwart cut, either by the Stalk, which it will easily do, or with the brand of your Knife thrust it into its place, and then having some Bass, (which is the best and readiest of any other sort of ties) wind it all over, except the very Bud, pretty close and tite, beginning at the lower end, that neither Wind or Rain get in to destroy your labours; and then tie it fast, and so let it rest for a Fortnight or thereabouts, or which is the surest way, until you discern your bass or ties begin to gird; but know that you may spoil your Bud as well by letting it be tied too long, as by untieing too soon; but for the most part a Fortnight is sufficient; sometimes again three Weeks is little enough, a little observation will put you out of doubt; but for such Stocks or Trees as are great and quick growers, as natural

Two Buds on a Stock may be sufficient if well put in.

Peaches and Roses, and the like, they must not be too long tied, least they gird and break off at the Budding place with Wind, which is usual: they that desire to be very curious, and have but few to mind, may untie at a Fortnight or Ten days end, and gently tie their Buds again.

There are other forms of doing this work, which are as followeth: having made choice of a good shoot or cutting of the same years growth, as aforesaid, cut off the leaves, leaving only the short Stalks; then beginning at the lower end of your shoot, a little above the Eye or Bud make an over-thwart cut quite round, and then cut the Bark on each side of the Bud from the over-thwart cut above downward an inch in length or thereabout, and then sloping each side towards the lower end, that it appear as the former turned upside down, then pull off the loose or superfluous Bark in the back-side, and lower end, then holding your cutting in your left Hand, your Thumb being against the Bud lest it should slip off, and then with the flat end of your Knife haft raise the Bark on each side of your Scutcheon, and then with a Quill or Budding Gouge mention'd before, take your Shield or Scutcheon off, keeping the Thumb of your left Hand pretty hard against the Bud, lest it should slip off, and leave the substance of the Bud behind; but for my part, when I did use this fashion of Budding, I did use no Quill, but after the Bark was raised on each side of my Bud as aforesaid, I did slip off my Bud or Scutcheon with the Thumb and Fore-finger of the right Hand, bearing the Fore-finger of my left Hand hard against on the contrary side, and so forced it off sideways, and a little downward withal, and then cut your Stock with an over-thwart cut on a clear place as aforesaid, and another from the middle of that downwards, and then the shape of those cuts on the Bark will be of the fashion of a Roman T; **T** then with the flat end of your haft raise the Bark on each side, **T** beginning at the top so wide, as that your Bud may lie flat or plain: put it in and tie it pretty close and tite, as was formerly said; this way I used divers Years with success.

Another form of Budding is this, having your Branch and Buds ready as in the former ways, cut the Bark with an over-thwart cut quite round both above and below your Bud you would take off, then cut the Bark on each side your Bud with a down-right cut from the upper-thwart cut to the lower, then pull off the back part of the Bark behind your Bud, and lay it on a clear place on your Stock, where

where you would have your Bud grow, and then with your Knife cut the Bark off your Stock, with two over-thwart cuts, just of the same length with your piece of Bark, and then give another cut on the Bark of your Stock down-right from the upper over-thwart cut to the nether-most, and then open the Bark of your Stock on each side; then raise the Bark on each side of your Bud, and force it off in that manner, as was mentioned in the former way of Budding, and then your Bud or Shield will resemble the last form, but the cuts on your Stock this form, **I** then put in your Bud and it will exactly fit, then tie it up as **I** afore said.

Another way or form which is used by some, they cut the form of their Scutcheon with some Wood, as in the first manner or form of inoculating is mentioned, and then with a nimble slit which is easie enough, tear off the Scutcheon or Bud from the Wood, and then make ready your Stock after any of the former ways to put in your Bud either upwards or downwards; divers that use this way have only a short good cutting Knife with a slope point, with which they open the Bark of their Stock, they that have not the right sleight of taking or snatching off the Bud, are very apt to leave the substance of the Bud behind; the truth is, any of these forms or fashions will do very well, neither is there any odds more than that some are more easie or quick, as having fewer circumstances.

What Stocks are most suitable for every sort or kind of Fruit to be Budded, or Grafted upon, is already mentioned before. Another thing to be taken notice of is, that so many Stocks as are Inoculated and hold their Buds, you are to cut off the Heads of them about half a foot above the Bud, any time from the beginning of the Winter following, to the beginning of the Spring, only in case you have Budded any Nectarins or choice Peaches, you are to spare some small Branch off the Stock to grow up with your Bud, for the first Year at least; yet so as to correct it, that it do not master or starve your Bud, for there is some odds between a Natural and a Step-mother; this is chiefly to be done when you Bud Peaches and Nectarins on Plum-stocks; also you are diligently to overlook your Buds in the springing time, lest they should be destroyed by young Caterpillars, which are apt to breed on your Bud,

The over timely cutting off the Heads of Head-stocks, doth oft occasion Buds to be a little too forward, therefore if you forbear to Head your tenderest sorts till the Spring, they will be more sure.

Bud, especially your Apricocks, and will quickly destroy them if not timely prevented, therefore you are to search for them, and where you find the leaves to stick together; you may be sure to find them by gently opening the young leaves, with a Needle or Pin point, &c. Also when your Buds are shot out about half a foot or less, you are to tie a piece of Bass about the top of your Stock, in the most convenient places, and then to tie up your tender Shoor, not only for the more handsom growing of it, but also to prevent its breaking off by the Wind, or other accidents, not forgetting to prune off superfluous Buds or Shoots from your Stocks by degrees, as your Inoculated Buds get strength.

Of the order and manner of Planting Trees at large.

AND first I have here propounded to your View, the manner of Planting Orchards, or other Plots, after the handsomest and orderliest fashion, by which you may perceive how convenient it is to observe good order in Planting, and how capable the Ground is of being brought into several forms, without altering or hindring the order or beauty of your Plantation. And therefore if you desire to make your Plantation very beautiful to the Eye, you are before you begin to Plant, to level your Ground either into a flat or hanging level, as the nature or form of your Ground requires, or may most conveniently be brought to: The way or manner how to level, is very plainly set down in that part of the Book that teacheth the ordering of the Garden of Pleasure, to which I refer you for brevities sake. But if you are not willing to be at that trouble or cost, you may notwithstanding plant your Trees according to the order set down, the conveniences whereof are easily discerned. Then you are to stake out your ground according to the order propounded, or any other you like better; set your stakes exactly both for order and distance, as you desire to have your Trees grow; about a score of stakes or fewer may be a sufficient rule to plant a great ground by; if you will, you may, after you have set your stakes, begin and take up a stake to plant a Tree in its place, or you may let them stand as a rule till you have planted every part of your ground besides, and plant that last; but be sure you do not plant your Trees too nigh to one another, for by so doing, they will in a short time hinder one another of convenient Sun and Air, whereby your Fruit would be much better both for tast and colour; likewise you would lose the benefit of Roses, Goosberries, and Currants, which might bring much pleasure or profit for divers Years; as also of several
several

several sorts of Herbage, which might be very useful, as Carrets, Onions, &c. or of Grass, the which would be much better than when it is too much over-shadowed: let not your Apple or Pear Trees stand nearer than twenty foot, although the ground be poor, but in good ground twenty five, thirty, or forty foot asunder, and in so doing one Tree will be as good as two or three; but if any shall think this distance too much, then they may plant Cherries and Plumb Trees amongst, I mean a Cherry or Plumb Tree between every four Apple or Pear Trees, which of some is call'd Antick; the form of it is expressed in the foregoing Plate. And if you would have your Trees stand on borders, you are to make them before you plant, lest your Trees should stand too deep, which in all sorts of grounds is no small fault; take notice, that if you observe this order, your Cherry-Trees will be past the best in twenty Years time, or thereabout, which if they be then stock'd up, your Apple-Tree will be in a very handfom posture, whereby they will thrive and bear the better; if your ground be very wet, it will be worth your labour to make some sufficient Drains to draw the Water to some Pond or Ditch, or at least to make your borders whereon you plant both wider and higher; also if your ground be not good or rich of it self, it will be your best course to bestow a quantity of good Mould to every Tree, more or less, as the nature of the ground requires; for if it be gravelly, hard, or stony, or the like, you are to make the holes the wider, and bestow the more Mould upon them, for according to the goodness of your ground, or cost you bestow, you may expect your profit: take notice that Dung is not good to lay next the roots of your Trees, except it be converted to Mould, but then it is better being mix'd with your Earth than alone. You are also to prune both tops and roots of every Tree you plant, in so doing your Trees will multiply both branches and roots, which indeed is the main end of pruning, the neglect whereof doth sometimes occasion the loss of your Trees, or at least of the not thriving so well, or speedily; if your Trees be small, and are well rooted, then you may top them the less, but if of a considerable size, take off the more of his head, there will be the less danger of miscarriage; and in planting spread the roots, and let your Tree stand as shallow as you may conveniently, and in case any roots do incline too much downward, then you may give them a little plash, and lay them so as to spread near the upper crust of the ground, which is usually the best, and Trees (as I said formerly) receive speediest virtue and nourishment both from the Sun and Showers, only you are to have a little

the care of them the first Year, in case of a dry spring or Summer, and in such a case it will be well worth your labour to lay a little Horse-litter or the like stuff, round about your Tree, the compass of the root, and in so doing one watering will be better than two or three without it; and as for staking your Trees, I would never advise you to do it, if they will stand straight and handfom without it, especially after the first Year, unless (as I said) it be to make a crooked Tree grow straight, for case the head be too weighty for the root, which is a fault and would be mended; but see your stakes be straight, or in. I have known handfom Trees spoiled with crooked stakes; also be careful to tie your Tree close and tite, with some Osier or Willow twigs, or the like, lest by being too slack, the Wind cause your stake to fret or gall your Tree, which doth sometimes cause it to canker in that place; your best way is to renew your ties twice in the growing time of the Year, if your Tree be in a thriving condition, lest your ties should make a fault, and occasion your Tree to break off in that place; you may put a little Hay, or the like, between the stake and the Tree, before you tie them, there can be no harm in that.

The next thing to be considered is the season when this work of planting is to be performed, the which I have sufficiently spoke to already, in that place where I spoke of planting out of young Stocks, yet notwithstanding I will here repeat it again with a little addition: and therefore know that it is good planting of all sorts of Fruit-bearing Trees, and others, both for pleasure or profit, whose leaves fall in the Winter, from the beginning of *October*, (and sometimes sooner, as the Year falls out, which any indifferent Judge may easily apprehend by the rules before set down) to the end of *February*, and something after, especially if some rules be well taken notice of, which I shall mention anon: but the surest way is to take the head of the Season, for Trees will prepare and put more for root in a Fortnight or three Weeks when you plant betime, than they will in six or eight, when the ground is chill'd with wet and cold: and take notice, that you may ordinarily begin sooner to plant well-grown Trees, than those that are very young, and in a very thriving condition, especially young Apple-Trees and Peaches, whose Stocks were raised of the Stone or Kernel, which will be in a growing posture even until extreme Weather put them to a stand: and therefore for such as these it would not be amiss to stay a little longer, until the Sap be somewhat hardened, except your Tree be of such a growth

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as you may afford to take off a pretty deal of its top or head; or that the Weather be enclined to moisture, the which may be a good opportunity. I have sometimes removed both Vines and other Trees, in a case of necessity, at Midsummer, and with convenient watering and shadowing for a time, they have done very well; but this is no sure rule to go by, but only shew you what I have done, and may be by any in the like case, and sometimes to good purpose.

And altho' many of those Trees which are removed very timely, as in the end of *September*, and in *October*, may shrink and seem to wither much, yet they will recover and come to their former plumpness, and do well, as I have oft experienced. Remember that it will be to good purpose to water all such Trees as you plant either very early or very late, so soon as you have planted them: You may judge when the Sap is at a stand, by observing what I have writ in that place which treateth of the planting out of young Stocks, to which I refer you. Take notice, that Pear-Trees have ordinarily both less and more brittle or spalt roots, than Apple-trees, and therefore you must take more pains in opening the ground deeper and wider, when you are to take up any, and not to pull over hard, lest you leave most of the root behind; also the roots of such Apple-trees or Stocks as have been raised of the Kernels of good Fruit, are likewise more brittle than of those raised of Crab or Wilding Kernels: another thing worth taking notice of, is, that in case you have occasion to plant an Orchard, or any ranges of Trees near your House or Walls, against which you have, or intend to plant any choice Fruit, be sure to plant them at such a distance from your House or Walls, as that when they are grown up to any considerable bigness, they may not over-hang your Wall-trees, or hinder the Sun too much from coming to them, whereby your Fruit is much better in every respect; and as for your Wall-trees, be sure to plant your tenderest and choicest Fruit, such as Apricocks, Peaches, Nectarines, Figs, choice Vines, and the earliest and best sorts of Cherries, and where they may have half the day Sun at least, the more the better; and as for most sorts of Plumbs, and great bearing Cherries, less Sun will serve turn, and do well enough, yea, where there is scarce any for the greatest part of the Year, but yet the more they have the better tasted they will be; and as for the distance you are to observe between your Wall-trees, it is to be more or less, according to the height of your Wall, or the goodness of your ground; the most ordinary distance is three good paces, but where the Wall

is low, or your ground good, your best way is to observe a larger distance, especially for Pears, except they be Grafted upon Quince-stocks, otherwise you cannot keep them in good order without much cutting, which will increase Wood, but little Fruit, especially in such kinds of Fruit; but of this more afterward.

One thing more I will add to these Instructions, the which I have often proved very well worth my labour; that being resolved to plant either Trees or Stocks, but by reason of some other occasions I could not get my ground ready so soon as I desired to plant, the Season being fully come, I have taken up my Trees or Stocks, and pruned their roots ready to plant, and then have laid them in the ground, where they have remained, at the head of the Season, a Fortnight or three Weeks; and sometime when I have not begun so early, they have lain two Months or more, in which time they have so prepared for root, that being after set in their due places, they have been as forward as if they had been set in their order at the first taking up, whereby so much time hath been saved, and my Plants out of the danger of a dry Spring or Summer; only take notice, that those which you take up very early or very late, must not lie so long before you plant them in their due places, as those taken up in the more cold time of the Year: because, as I hinted, they will draw root sooner, and then having shot out young roots (which are very tender) before you plant them, they will be apt to be broken off; and prove a great hindrance; yet if they be not many, or very forward, the matter is not much.

Of the dressing and keeping your Trees in good order, and first of Wall-Trees.

After your Trees are well settled in their places, as also for those that are well grown, (for indeed I do not like their way that wholly neglect the tacking up of their Trees the first Year, if need require; for they that do are oft enforc'd to cut, and also to strain their Trees, to bring them close and orderly to the Wall, after a Years extravagancy, which at first might be prevented with little labour, and less damage) you are to provide some nails, some bigger and some less, according to the goodness of your Wall, and bigness of your Trees you are to dress; for some Walls will hold a three-penny, or four-penny nail, better than some other will a six-penny nail; likewise some branches require a greater, others a less nail;

nail; according to the stubbornness, weight, or plyableness thereof; also you are to provide some parings of Hats, or the upper leathers of old Shoes, or some parings of leather from the Shoemakers, which two last are more durable than the former, the which parings of leathers are to be cut into narrow slips the breadth of a Man's Finger, or thereabout, and then cut into short pieces, about three inches, some four, and some longer, as the bigness of the branches may require, so as not to gird your branches too much, neither to let them have too much liberty, the mean is best; if you drive your nails into one end of your leathers, before you begin to tack up your Tree, I take it to be a ready way; then you are to spread every branch in an orderly manner, one by one, that your Tree when it is nail'd up may resemble the form of a Fan, not laying your branches a cross upon one another, if you love good order in your work: You may begin either at the top or bottom, and in case your Wall be low, you must spread your branches the more in breadth, they will run too fast upward, leaving no Wall room unfurnished, if you have branches although pretty near the ground, cutting off none but such as shoot fore-right and will not come close and handsom to the Wall, except your Tree be poor and not thriving, which if it be, it will be your best way to take off some of the branches or Arms in convenient places, from whence you would have your Tree to multiply its branches.

The Season for this nailing and dressing, is any time from the fall of the leaf, until the rising of the sap, but for Apricocks, whose Blossom-buds grow very goale, towards *Christmas*, it is best not to defer the dressing of them pretty timely, otherwise many of their Buds will be apt to be rubb'd off; yet this I will tell you, if your Apricocks are apt to blow too early, and thereupon apt to miscarry, then your surest way is to defer the cutting and nailing of them up until they are ready to blossom, but then you must be more than ordinary careful lest you spoil too many blossoms; by this late Husbandry I have had plenty of Fruit; but remember upon what account I approve of this backward or late dressing, it is no general rule, one inconvenience is incident to Apricock-trees that are not timely nailed, chiefly in case of much Snow, or extream Frost, for then some sorts of Birds are apt to pick off the Blossom-buds, and make more wast having the branches more at liberty, as I have often seen; the Bird call'd *Tom-tit* is one of the chiefest in this mischief. But besides this Winter Husbandry, there is Summers dres-

sing of Wall-trees, found by good experience to be as profitable for the increase of Fruit as the former, besides the handsomness, as also for the better ripening or beautifying of the present Fruit, by careful and discreet cutting off such branches as are too much extravagant, and hinder convenient Sun from your Fruit, or carefully to nail or tack them up where there is convenient room for them to lie; also the cutting off the tops of some of the goalest or forwardest branches, doth oft occasion them to knit for Fruit the better, if done about *Midsummer*: You may prevent unnecessary branches, by rubbing or cutting off such Buds as come forth where there is not convenient room for them to be laid, and may prove a very good piece of Husbandry for the curious, to busie themselves about in the growing time of the Year, and will prevent much pruning, which is very good in divers Fruits: but remember, as I hinted before, that this Summers dressing must be done with a great deal of care and circumspection, lest you should shake your Fruit down: where this Summer's dressing is used, there is no need of plucking the leaves to make Fruit ripen or colour; but if it do seem needful, let your Fruit have its full growth first, lest you spoil it. Also in case your Trees be over-charged with Fruit, as sometimes they be, which occasioneth your Fruit to want that good relish, besides the size they use to have, in such a case it will be good Husbandry to pick off some of the smallest or under Fruit, that so your Tree may bring the rest to better perfection; but this must not be done until the danger of miscarriage by *May's* Frosty Mornings be past, neither defer it too long.

The next thing to be considered is, that in case your Trees do not thrive, either through the barrenness of the Soil, being too dry, wet, or cold, &c. you are to endeavour to amend those defects as followeth: if your ground be too dry, (which causeth Fruit to starve, and sometime to fall off) gravelly or stony, you are to open the ground some reasonable compass about your Tree, and if your Tree be old, and of long standing, you are to open it at a farther distance, that you may bestow your cost most where the most and youngest roots or feeders are, from whence your Tree receives its principal nourishment; and not only close to the body of your Tree, as is usually practised to little or no purpose, in Trees that are well grown, and fetch their nourishment at a greater distance: and having opened the ground, you are to cut the ends of all such roots as you meet with, and then to put in some good Earth, either of good short lome,

some, or other hearty Earth; to and amongst the roots, spreading them and inclining them rather shallow than deep: and in case you use Dung, your best way is not to lay it very deep, neither next the roots of your Trees, but put some Earth between the roots and your dung, whether you lay your dung above or beneath the roots, and then level up your ground again; and if to this you do but prune your Trees a little, as you see cause, you shall not fail to have a thriving Tree.

If the Earth be of too cold and clung a nature, the which is not very pleasing to many tender Fruits, often causing it to rot on the Tree, or often to want that good relish which is proper to your Fruit, or not to ripen kindly according to its nature and season, if your Tree stand too deep in such natured ground, it is not easily helped without taking up and new planting both shallower, and mending the ground with a more warm and better natured Earth; but if you may not take up your Tree, as being too old, you shall open the ground until you come to the roots, the which you are to raise, at least good part of them, and cut the ends, and lay them as shallow as you may conveniently, covering them with some good natured Earth; as for those that root more shallow, they are more easily and surely cured by the same means, either by taking away of the bad Earth for some reasonable compass, or at least by mingling it with some very good earth, very rotten dung, or some Lime-rubbish of old Walls, &c. which is exceeding good to mingle with any cold-natured earth, so likewise pretty store of Sea-coal ashes, well mingled with your dung or mould: but these ashes of themselves are very dry and barren, but very useful, being mingled with any cold or wet ground, also small ruddish Chalk, and Sand well mingled with good earth.

Also if your ground be very wet, then you are to make some convenient Dreins, of such a depth as may be to purpose, and carry away all that offensive moisture to some Ditch or Pond, where it may be useful, or at least not offensive: if your Dreins or Trenches be made of a considerable depth, at least some principal ones, it will destroy Rushes, and some other offensive plants that are naturally fed by the excess of moisture; these Dreins or Trenches, if you are not willing to be at the cost of Brickwork, &c. to convey the Water under ground, then you may fill them up with great stones, laying them in such manner for hollowness, as notwithstanding there may be a

cient passage for the Water to drein or pass away as aforesaid, you may first upon the stones lay some course gravel, and then cover them level as you see cause, by this means your over moist ground may be made more apt for to plant Fruit-trees upon, or other Garden-herbage, &c.

Of the Ordering or Husbanding of those Fruit-Trees that stand at large in Standards, as Apples and Pears, &c.

Your best way is not to prune them either much or often, if you love Fruit more than a Tree to thrive in Wood, and therefore I would advise you whilst your Tree is young, to endeavour to bring it into a handfom shape and order, and when it comes to bear Fruit, forbear pruning, unless in case of broken, or such boughs as grow cross, and lie galling or fretting others; but in case your Trees, or any of them are hide-bound, and thereupon do not shoot and thrive, then you are to make use of the former instructions, by pruning both top and root, and amending the earth if it be faulty; but sometimes, only cutting off some of the branches, or topping your Tree towards the Spring, or in Winter, and then with the point of your Knife slit the Bark of your Tree in two or three places, from the top, or heading place, in case it be hard, it will be the better.

Take notice, that many a good bearing Tree, both Apple and Pear, have been much hindred by much and often pruning. Indeed for Stone-fruit, in case they grow old; or too thick, and if they be headed pretty near, they will become as young, and recover their bearing quickly again.

But yet in case your Pear or Apple Trees are grown old, and for want of nourishment are not able to bring their Fruit to that perfection as formerly, in such a case, to take off some of the most undeserving boughs, such as have least benefit of the Sun, or most unhandfom Water-boughs, as some call them, that grow altogether under the droppings of others, this pruning in the aforesaid case, hath done good, but I do not like it should be often done; so likewise if a Tree do thrive exceedingly in Wood, and doth not bear Fruit, to thin it a little, that the Sun and the Air may have more free passage amongst the branches; but if for all this it doth not bear Fruit in some considerable manner in a Year or two after, then your best and surest way is to Graft it again with such a Fruit as you find doth

doth bear well in the like Air or Situation; the manner is taught before, and is worthy the practising in such a case.

And as for the opening of the ground about old Trees, as it is usually practised with many, about four or five foot wide, and letting them lie open a Month or two, or more, and then filling them up again, adding some Dung or Chalk, or both mingled together: for my part, I do not see any reason how it should advantage either the Tree or its Fruit, either as to its thriving or bearing, because such old or great Trees, I mean Apple or Pear Trees, that fetch their feeding or nourishment at a far greater distance, so that the cost comes not near those roots that feed or nourish the Tree; indeed, for young Trees, whose feeding roots are within four or five foot of the Tree, this Husbandry may be to good purpose, as also for Cherries, and Plumbs, which usually are pretty full of feeding roots nigh home, if not very old: I say to such, this Husbandry may contribute to the thriving, and also the bearing of the fairer Fruit, if not used too often.

If your Trees be subject to Moss, the which is incident to Trees that grow on cold clay grounds, as also wet grounds, and likewise to Trees upon some sorts of dry grounds, but the kind of Moss is much differing, for that on the cold and moist grounds bring a long shaggy Moss, the other a dry scurfie Moss, both are enemies to your Trees, and very unhandsome, and therefore worth the labour to cleanse them; if your Trees stand too thick, or nigh together, it is so much the worse, for the more Air and Sun they have, the less the Moss doth encrease, and the ground hath the more benefit from the Sun-beams to warm and quicken it; if you find your ground to be over-wet, use the former Instructions of Dreins, to make use of such kind of soil as is of a warming and comforting nature, also to scrape or rub off the Moss as much as you can with an Iron Tool, made in shape like a Howe, or Dough-rake, made a little hollow on each side, the better to answer the several shapes or sizes of boughs that are to be Mossed; it is to have a convenient stail or handle, rather short than long, except you stand on the ground to do your work; the most convenient Season for this work is in the Winter, when the Moss is something moist; defer it not too late, or nigh the Spring, lest you spoil too many Blossom-buds which then grow gale and brittle, but if, as sometimes I have seen that the Moss is so much and long, that it even smothers the branches, and consequently

quently hinders the bearing of Fruit, and seems an endless labour to Moss it, then your surest way is to prune off the greatest part of the head, and Moss the rest, or to take off all its head, and your Tree will shoot and become as it were young again, and do service; and in case your Plantation be too thick, which in cold Clay grounds occasions Moss to increase the faster, you are to mend that fault by taking away some of the worst deserving Trees, whereby your others may become more fruitful, or at least better tasted Fruit, (and Moss less apt to increase) by having more benefit of the comforting and fructifying virtue of the Sun and Air. If the cause of the Moss on your Trees be the driness or barrenness of the ground, then besides scraping it off, you may help your Tree by opening the ground at a good distance about your Tree, and lay amongst the feeding roots, at least as many as you meet with, some good short lome or the ferowing of Ponds or Ditches, which will keep moisture, and nourish your Tree better, and some times prevent the falling and worm-eating of Fruit, which is incident to dry and barren grounds. Take notice, that notwithstanding these directions are very good, being seasonably and suitably perform'd or made use of, yet if your Tree bear Fruit competently and good according to its kind, I would advise you to forbear tampering with it, either by opening or pruning, unless in case of necessity, as in the case of dead, cankered, broken, or galling boughs, misshapen, and the Moss, which ought to be done with care, lest you spoil or break off the bearing Buds, and disappoint yourself of Fruit.

The Canker is as bad a mischief as any that happens to Trees, but especially to young Trees, which being small, are eaten or tainted round before one is aware of it: therefore if your Fruit be of such a kind as is subject to canker, as of a truth some are more than other, which makes it clear, that the cause is in it self in a great measure, but yet very much furthered when it happens on a ground which doth feed that sharp humour, which may be the cause; in such a case it is hard curing. We see amongst Men some Constitutions are more subject to Itching, or breaking out, occasioned by some sharp or virulent humours, which is either more or less furthered, as they delight or feed on such kind of Diet, or Drink such liquours as feed that humour. Sometimes too deep planting causeth Trees to canker and blast on the top, and in some that are very subject to it, a little bruise, and sometimes unseasonable pruning.

This.

This may be a sufficient satisfaction or resolve from a meer labouring Gardener, who hath neither time to make more experiments, nor learning to express the reason and cause in a Philosophical way: which would have been very acceptable to Scholars, &c. but I hope it may be reasonable satisfaction to those young practitioners in the Art of Gardning, for whose sakes I chiefly write these Instructions. The way of Cure follows.

As I said, if your Fruit-trees are of such kind as are more than ordinary subject to Canker, or the nature of your ground more inclining your Trees thereto, your diligence is to be the more, in often viewing and searching your Nursery or Plantation, especially of your youngest, and upon the first opportunity to cut out the least speck of Canker you meet with; you may know when you have cut it out sufficiently by this, if after the cutting thereof, the Sap in a little time after appears of a reddish colour; it is not sufficiently cut out; but if on the contrary it continue fresh and green, it is a sign of soundness: this clean cutting of it out, I have found to be sufficient for the Cure of the place so cut. But Beside the cutting of it out, some use applications to the place, as Cow-dung and Piss mingled, others Horse-dung mingled with Clay, some Hogs-dung, or dung of a Jakes; others, after they have cut it out, and hack'd it round about the cut, do wash it often with strong Vinegar, or you may slack a Lime-stone in a little Water, Piss or Lie, and being pretty thick, apply to the place, being as I said first cut out; others use means to prevent the Cankering, by laying some store of Hogs-dung in the hole where they plant their Trees, or some round about where the Tree roots are to run; and this I have heard some affirm with much confidence for a certain prevention; some use Buck-ashes, other use Buck-ashes, Fern, and Nettles; others in case their ground be gravelly, or of a nature inclining thereto, where they are to plant, use store of good short Lome, Clay, or the Scouring of Ponds, all which may prove very beneficial in one kind or other; but I have oft observed, as I said before, that where the Canker hath been exactly cut out, it hath been cured without any application, whereas many by trusting too much to their Medicines, have neglected the principal of the Cure, I mean the exact cutting of the taint or infection out: I do know upon good experience, that too deep planting is as great a cause of Cankering, and blasting the tops of Trees, as any thing, as also of not bearing Fruit. I have observed in divers places, that Trees whilst they were young, were very much troubled with the Canker, the which, when they had gotten some

some growth, were quite freed from it only for a time whilst young, cutting it out as occasion required; but if you find, as indeed it sometimes so falls out, that you cannot rid your Trees of this disease, as it happeneth with some sorts of Pippins, Harvie-Apples, and some others, in some sorts of ground although of a pretty good nature, so that what your Trees shoot this Year, dies the next, or before: if it do not bear Fruit in some considerable manner, then it will be your best course to cut off the head of such a Tree, or Trees, leaving only some convenient arms or boughs, whereon you may Graft some other sort of Fruit, which in the like ground or situation doth bear Fruit well, and is not so subject to Canker.

In case any arm or bough be broken by the Wind, or other accident, your best way is to cut it off close and smooth, although it be in the Summer, except it have Fruit on it which you desire to save, the hurt being not so great as to hinder the passage of the Sap: in such case, by tying it to some convenient neighbour bough, or some prop, your Fruit may grow to maturity; and then if you desire to preserve it, you may cut off some part of it, that so the Wind may not have too much power on it, or its own weight, to destroy it, until it be strengthened by the return of the next Years Sap; if you will, you may bind some tempered Clay to the fracture, if not, I know no inconvenience in the neglect, some account it robbing of the Tree or root of so much Sap, by cutting branches, &c. in the Summer, supposing a descent of Sap into the root again, which is but a mistake, as I have before mentioned.

Misseltow is another inconvenience to Trees, robbing them of some useful sap or nourishment, which might be better employed, and therefore to be cut off where it appears.

Gum is another evil hapning to those Trees that bear Stone-fruit; I know no other cure, but to cut it pretty close where it doth issue out, the which will in time heal up again; some grounds are very subject to it, inso much that any little strain or bruise inclines to breed Gum, which sometimes spoils Peaches, Apricocks, &c.

And besides the diseases that Trees are subject to, the Fruit is often destroyed or defaced by some kinds of Vermin, also Birds, the which doth most mischief in the Winter, by pecking off the Blossom-buds: in hard Frosty or Snowy Weather, they do likewise spoil Cherries, the which both Jack-Daws and Jayes do: amongst small Birds the Tom-tit and Bull-finches do most mischief, the which with Lime-twigs conveniently set, you may take many of them in hard Weather, on your Plumb and Apricock Trees, or you may destroy
many

many with a good Trunk, or Stone-bow; as for Jays, Mag-pyes, and Jack-daws, they are to be destroyed by Shooting them, or with Springs, by them that know how to set them for the purpose, which some do; some do take of these Fowls alive, and tie them in some convenient place, where they will scrame or cry, especially the Jay, and will cause divers of their kind to gather together, by which means you may make greater destruction amongst them with your Gun: they that Dwell near Woods may make good use of this Experiment.

Crows and Jack-daws are great destroyers of Pease and Cherries, they may be frighted from coming to your Pease or Wheat, as I have made trial divers times, and for any thing I know to the contrary, may be as effectual for the preservation of Cherries, if you shoot one or two, or more, if your ground be very large, and then in some open place near where they hunt, make a hole about the breadth of a Bulhel, and as deep, or more, and then pull your Crow, or the like, and stick and scatter the Feathers all about the hole, and some in the hole, and while the Feathers continue any thing fresh and dry, there will neither Crows nor Jack-daws come near to meddle with your Pease, nor with your Cherries, I believe, after they have seen that sight.

Snails are likewise great enemies to Wall-fruit, and especially to the best sorts of Nectarins; you are to search for them betimes in the morning, or when it raineth, at which times they will be stirring about; at other times you may find them in the holes of your Wall, if there be any, or in other shady places behind Weeds or Herbs, that grow against Walls or Pales; also if in several places near your Trees, you set some small Boards ends, or the like, leaning or lying something hollow under, or behind which the Snails will creep for shelter from the Sun, where you may take them and destroy them.

Earwigs may be taken and destroyed, if in divers places of your Garden you stick some pieces of Canes, or great Kixes of Hemlock, hung or stuck with the hollow end downward, so as they creep in; also the Hoofs of Cattel hung on the tops of sticks in divers places, into which they will creep for shelter, and once a day to take those Canes or Hoofs, and knock them on the ground, and destroy the Earwigs with your Foot.

Piss-ants are another sort of troublesome guests in a Garden, and amongst Fruits, you must search out their hills or place of abode, and having provided some scalding Water, open the ground a little,
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and pour the Water into their hole or habitation. Another way which some have used to destroy them, is by making some small Boxes of Cards, in the which they have put some Sugar, being first mingled with some Mercury, and beaten very fine, making some holes in the Boxes, of such a bigness only as Piss-ants may creep in, lest you should destroy Bees; these Boxes are to be hung or set in convenient places where the Piss-ants do haunt. Some use Brimstone powder to stop the passages out of their holds or habitations, others use Tarr, or some other Gummy stuff, to anoint round the foot of their Trees, where they go up to eat their Fruit; in Standard Trees it may do something to prevent them, but the most certain way is to prevent them in their places of abode, or dens.

Wasps are likewise spoilers of Fruit, and may be destroyed by setting divers Gally-pots or others, half full of Water, in convenient places, and linearing the tops and insides with Honey, or Honey'd Water; or you may hang several Glasses so dressed in such Trees, where you desire most to preserve your Fruit from such guests.

Catterpillars, of which there are divers sorts, but those are the worst enemies to Trees and Fruit which are bred by the East Wind, when Trees first begin to shoot out their green Buds or leaves, the which, some Years where they prevail, make such destruction, that the Trees look as if they were blasted; they are bred within the Leaf or Bud, or at least quickly make way under the fold of the Buds or Leaves before they be spread out, and there continue until they have destroy'd the very heart of the Bud that is for shoot; likewise those for Blossom and Fruit: some, that have but a few Trees and leisure, as also a love to their Fruit, have with a kind of Pump or Force made for that purpose, and being set into a Tub of Water, have often washed their Trees, both against their Walls, and others, whereby they have saved much Fruit, besides some convenient shoot or growth of their Trees, which otherwise might have been lost. These kind of Catterpillars are very prejudicial to young Grafts, and Inoculated Trees, especially of the first Year, which if not timely prevented, doth sometimes quite destroy, or at least hinder much of their growth, and oft spoil the gracefulness of their shoot. Amongst young Grafts, they must be search'd for as I have elsewhere directed. Birds do much injury to young Apples and Pear Trees, by lighting upon the young and tender tops of them to search for Catterpillars, and thereby have broken them, which have caused some to think, and say, they were catch'd off by some other kind of

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Vermin. Other sorts of Caterpillars there are, which are ingendred of Spawn, which at some times of the Spring you may find on divers sorts of Trees and boughs, wrapped as it were in Cobwebs, the which being taken before they are dispersed, and destroy'd, they will do no farther harm, otherwise you may often find they will eat off all the leaves of the Trees where they are. Other sorts there are, but they are but few, and may soon be found with diligence. Another sort that use to eat up the leaves of Gooseberry-bushes, I have mentioned elsewhere, besides those that spoil Cabbages, Colliflowers, and Turnips, spoken of elsewhere; likewise some affirm with much confidence, that the ost smoaking of them with old Hay, or Straw, using the advantage of the Wind in the Spring, to be a sure prevention.

There is another sort of Vermin which is a very great annoyance to Cherry-trees, especially great leav'd Cherries; it is a small black Bug, and will be in great numbers on the leaves and springing Buds, tainting the Tree, although in a very thriving condition, causing the Sap to be at a stand, even in the chiefest time of growing; what the name of it is I know not, or whether that Bug, call'd a Lady-bird, do cause them, I know not, but I do commonly see that Bug on Cherry-trees, and amongst those small Bugs, whether to feed on them, or to cast that Spawn whereof they come: the only cure that I know, is often to wash or dash them after the manner mentioned a little before.

Orchards, and Nurseries, have divers other Enemies and Casualties whereby they are apt to be spoiled, as Deers, Goats, Hares, and Conyes, the best and surest prevention is a good Fence; but if Conyes or Hares do come amongst your Trees, either willingly keeping there, as some do, or by coming in against your will, if your Trees be young or smooth Bark'd, they will be apt to be spoil'd by them in hard Weather if not prevented, either by pitching up some Lathes round your Trees, or making some Trunks about each Tree either with three or with four sides, or by wrapping some old, either Woollen or Linnen Clothes, or old Stockings, about each Tree, so high as a Hare or Cony may not reach to Bark your Tree above it, and then dawb it with any kind of dung or garbage of Conyes, &c. and this will cause that they will not meddle with your Trees so long as the smell thereof remains; also some use Lime, being first slack'd, and being pretty thick, dawb their Trees of a convenient height: this must be renewed as you see cause.

To prevent the Inconvenience of great and strong Winds, which often occasion the loss of much Fruit, as also the breaking of some arms or boughs of your trees; the best prevention is to plant some sorts of Trees as may break the violence of the Wind from your Orchard, yet at such a distance, as they may not prove a worse inconvenience than the Wind; either by over-hanging, or hindring the Sun too much from your Orchard, or by the running of their roots amongst your Fruit-trees, which in time they may do, and hinder them of much necessary nourishment; some have used divers sorts of Plumbs, some Cherries either red or black, which indeed will grow to a great stature. I have mentioned divers sorts, which may serve for such a purpose, as you may read toward the beginning of the Book, only you are to consider which are of a large growing nature, and which not, and accordingly to plant them at a fit and convenient distance.

There are some other Casualties sometimes happening to Fruit, as Blastings, Frosts, &c. which none but the Provident Hand of God can effectually prevent; only there is a means, that is, and may be used, and often to good purpose, for some sorts of early Blossoming, and tender Fruits that grow against Walls, as Apricocks, &c. the which in some Years, and also in some warm natur'd grounds, and very warm situated places, do blow very early, and are oft overtaken with Frost, and come to nothing, the which miscarriage to prevent, you may hang some Basse-matts, or Canvas, or the like before them, from the time of their first beginning to Blossom, until they are well knit or set, and for some time after, if you see occasion, opening or uncovering them every day, in case the Weather be mild; but open them not too early, nor very late, except the Weather be very mild, and after you do once begin to cover, you must be careful that you do not neglect to be constant, for you must know that covering will make them more tender, and therefore more apt to miscarry; also you must make such provision, that the Wind may not cause your covering to flap too and fro, and so cause more miscarriage to your Fruit, than if you had not covered it at all. Also know, that by much covering and hindering your Trees from the benefit of the Sun in their usual time of blowing, you may cause your Fruit to come later than is usual for that kind of Fruit to do; and oft cause some sorts of Fruit to bear pretty well, which ordinarily do not at all, or very little. Other ways might be related, both for these last mentioned Casualties, and all the other, but
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in regard they are either very troublesom, uncertain, or full of danger, I forbear to relate them.

Of Vines and their Ordering.

First for the encreasing of Vines, you may set them of cuttings from the fall of the Leaf, to the end of *February*, either all of the same Years shoot or growth, or you may take a joint or two of the former Years growth with your set, but it will do well enough being all of the same Years growth; let them be set the depth of two or three joynts in the ground or more, if the joynts be near or thick, and as much above ground; those cuttings are accounted best by some, that are thickest of joynts; let your ground be good, and the Situation temperate, not too dry, nor too wet, and after they have had two Years growth, you may remove and plant them in convenient places for bearing: when Vines are taken up to plant, being but of one Years growth, either of cutting or layer, their root consisting only of a few sappy strings, in case they be not speedily planted before the Wind take their roots, which will quickly be if not prevented, then I say your labour and expectation is frustrate; therefore as I said, let your Plants be of two Years growth before you re-plant them, unless you use more than ordinary dilligence; some that have choice Vines, and desire to increase them, if they cannot lay them on the ground, do make divers little troughs or boxes, &c. and fasten them in convenient places about their Vines, and therein lay several branches to root, and in fit season for planting cut them from the Mother-plant, and dispose of them as they desire, only they are often to moisten them, that they may take the better rooting: Vines are likewise often and easily increased by laying down some branches either young or old, (about half a foot deep in the ground or less) which being well rooted, may be cut off and planted elsewhere any time in Winter, and implanting, let them have as much Sun as you may conveniently, the pleasure or profit, in all likelihood will be the better, as to the ripening, &c. there are several ways of planting them, some against House-sides, where in some places they run a great height, and bear very much Fruit, some against lower Walls or Buttresses, constantly keeping them within some small bounds, some plant them against Walls, but suffer them only to run on the top, or Copping of their Wall, some against Pales or Pole-work, Hedges or

You may lay at any time of the Year either Spring, Winter, or Summer.

Arbors,

Arbors, and some plant them after the manner of Vinyards in several standards, about three, four, or five foot high, and about three or four foot asunder, some tying them up to stakes, and some without, where they bear Fruit very prettily, and most commonly ripen well if the Ground and Husbandry be but good, (and the ground not too cold) and the kind not too tender: Now the Season for the pruning of your Vines, it is any time from the fall of the Leaf, to the end of *February*, but most cut them from *December*,

It is very good Husbandry when your Vine grows old to cut and supply young in its place, it will bear the better and fairer Fruit.

to the end of *January*, or middle of *February*, and many only in some of the twelve days; I have sometimes cut Vines in *March*, but found no other inconvenience: except their Fruit being a little later in their ripening, which I confess is something in

case your Vines grow on a cold ground or bad Situation for Sun; another inconvenience by late cutting, is their aptness to bleed much, which to some Vines that are not very lusty, may occasion not only the lateness of the Fruits ripening, but sometimes the starving of the Fruit, and sometimes although but seldom, the death of your Vine; in the cutting of your Vines, if they are very lusty, you may leave only one Joint or Bud at a place, besides convenient runners for the furnishing of your Wall, but where Vines are but moderate in their growth, you may leave two or three joints at the most; some are so diligent and observant in cutting, that when their Vines do bleed (as most do little or much at the rising of the Spring) if you mind it, you may cut so as it may not bleed on the Buds, but besides, that it bleed not upon the Buds they leave, lest it kill them. As for those Vines that have but little room to spread in, they are kept very bare, as only one or two arms, and the rest cut either within one or two joints of the Stock for bearing; so likewise those that are planted in several standards, as a Vinyard, are kept to one or two standards, being fastned to a good strong stake, and cut either very near, or leaving two or three joints, and in some places they have made a ridge between every two ranges of Vines, that so the reflection of the Sun might the better hasten their ripening; but besides this Winters pruning, they are to be drest once or twice in the Summer, once about the time of their blowing, cutting off unnecessary shoots, or placing them in convenient order, and likewise bringing your bearers conveniently near your Wall where they may have the best advantage to ripen; the other time of dressing or cutting, is when they have their full growth or near it,

when

when you are to cut not only superfluous branches that have no Fruit, yet so as to keep beauty or comeliness in your Tree, but also to cut the ends of those that have Fruit, leaving some two or three joints above the cluster, lest you should stunt or starve your Fruit; also if you see any new or young sprouts spring out that may rob your Fruit, or any way hinder it as to its growth or ripening, you are to cut or pull them away; only if any branch comes forth in convenient places either to lay for increase, or to supply in place of some too old, you are to preserve it, and help it, that it may be the stronger for any the aforesaid purposes, remembring that young are more plentiful in bearing than old, besides the handsomness; your Vine is then too old, when it sends forth but few or weak starving shoots, and bears but little in comparison to what it had wont to do: now in case your Vine do not thrive, and bring its Fruit to that perfection it formerly did, and that the cause was not through the unseasonableness of the Year or Weather, then you are to consider the nature and temper of the ground, from whence your Vine hath its nourishment, whether it be not too hot and dry, which oft is accompanied with barrenness; in such a case you are sometime in the Winter Season to open the ground some compass, where the roots run either more or less, according as your Vine is in age or largeness of growth, because the older your Vine is, the farther it doth fetch its nourishment, and accordingly to be helped; first cutting the ends of such roots you meet with, and laying some good mold, or mold mingled with very rotten dung, or having first laid the mold to the roots, you may spread some dung upon the Earth, or pour some quantity of Beast Blood, the which in short time will, so renew your Vine that it will become as young again; and thus you may renew and help your Vines with soil, either of a hot or colder nature, as you see cause, and as I have formerly directed before speaking of Wall-trees and their ordering; this forementioned Husbandry will cure the changing of your Vine-leaves either red or yellow, when it happens in the growing time of the Year, except it proceed from some other defect in the root or body, as rottenness, or Worm-eating, or some other accidental chance, the which it may possibly cure by breeding new roots, and new shoots in place of the other; do but remember that the extremes of either heat or cold, wet or dry is prejudicial to all Plants and Fruit-bearing Trees, and then you cannot be wanting in the knowledge how to help in case of need; Lime-rubbish of old Walls, Pigeons-dung are highly accounted of, to be mingled with any wet and cold natur'd ground, where

where you plant Vines or other moist kinds of Fruit that are tender ; as to the bleeding of Vines which happeneth by over-late cutting, or some other accident ; I for my part did never know any Vine die by that means, and therefore was never occasioned to make experiment to that purpose, only some have set down means to stop the bleeding, which I suppose hath been only in case of cutting or breaking some great arm or branch : the means was either by binding some Sear-cloth about the place, made of Pitch, Rosin, and Tallow, &c. or with some hard Wax, or Searing ; Some have boasted of a charm to that purpose : but let this suffice for the ordering of Vines, tending only for the pleasure of the Fruit to be eaten.

Of Roses, their ordering and increasing.

AS for the increasing of Roses, of which there are thirty or forty varieties, they are not or at least very rarely increased by the Seeds, although they may even as well as Sweet-bryer, although indeed they are something more tender, neither is seed to be had so easily or plentiful ; the truth is, it is with Roses, as it is with many other Flowering-trees and shrubs that are hardy enough, and apt to be increased by suckers, layers, cuttings, or slips, yet being raised of seed, they come forward very slow, and very oft apt to be spoiled by hard Winter-weather ; but if any desire to sow their seeds, by which means possibly some varieties may be raised from some sorts of them ; your best way is to sow them so soon as they be ripe, yet before they are, as I may say, dead ripe ; for I suppose it may be with them as with Sweet-bryer, which being sown as soon as they turn somewhat red, they do better than when they are very ripe, from the end of *August*, to the end of *September*, is a good Season ; you are to break the Pod or Hip, and sow the seeds, or you may keep the seeds in some indifferent tempered mould, until *February* or *March* ; but you must not keep your mould over dry : the way to see the proof of your sowing more speedily is, that so soon as you have raised some plants although they be but little bigger than a good Crows-quill, you may take some Buds off about the end of *July*, or in *August* or *September*, for so late, and sometimes a Month later you may inoculate Roses, you may Bud them on the *White* or *Damask-rose* Stock, or on other sorts of Roses double or single, by which means you may as I said, see what variety your sowing hath produced in a far shorter time than the natural Plants will.

Also

Also Roses are, as most know, increased by suckers that spring from the roots, the which some sorts of Roses bring forth in great plenty, after they have stood some time in a Garden, the which being taken up from the Mother-plant in fit Season, and planted in convenient order, will furnish you with Flowers according to their kind; they are also increased by laying down some of the shoots or branches, covering that part you lay about a Hand breadth deep, or thereabout, not covering the very top of the shoot, you may keep them down with a hooked or snagged stick if they be stiff, the young shoots of the same Years growth are best for the purpose, but if your Tree doth not yield neither suckers nor shoots fit to lay, then you may cut your Tree pretty near the ground in case it be natural, and then it will be apt to send forth shoots for your purpose, and it may be suckers likewise; but if you may not or will not cut your Tree down low, then you may only top his branches or head, by which means you may have shoots either to lay, or at least to bud; but in regard some sorts of Roses are not very apt to take root, being laid in an ordinary way (as the Musk-rose for one, although it will sometimes grow of slips or cuttings) therefore for such it will be your best way to prick or hack that part you are to lay with your Knife, or which is more sure for such sorts, to cut your shoot with a cross-cut, and then upward with a slit, as you lay Flowers, putting a little earth or any convenient thing to keep the slit open; you are to cut it at the bottom of a bud or joint, for there it is aptest to take root, and then lay it down in the earth as aforesaid; if you lay them in the Summer, they may be fit to take off and plant out the Winter following, remembering to give your layer convenient moisture in case of drowth, you may lay both in Winter or Spring likewise, and by the Winter following they will be fit to cut off and plant as occasion serves; divers sorts of Roses are likewise increased of branches, slips or cuttings without root, being set in convenient places not too dry, from the fall of the Leaf, to the end of February, but are to be kept moist in case of a dry Spring.

Another way for the increasing of the several sorts of Roses, is by Inoculating, which may be best performed on such sorts as are most lusty and free of shoot or growth, as the White or Damask, &c. after your Buds are taken and shot pretty well, which will be the Spring or Summer following, sometimes the same Year they are budded, which is in case of early budding of them, or pruning them much, or heading your stock too soon; but it is best when they

The manner how to inoculate is taught before.

do not spring until the Spring following, unless you bud of the Monthly Rose very timely or early, to have it flower in *August* or *September* following, the which it will do being budded in *April* or *May*, as I have often try'd; but as I said, when your Buds are pretty well shot out, you may if you will lay them to make them natural as afore mentioned, by laying them down in the earth, or by laying them in some Pot of earth, &c. by Inoculating you may have several varieties of Roses grow upon one Standard or Tree, and that they may blow together, you are to bud the single sorts, or such as blow at the same Season together, which will be a pretty ornament in a Garden; as for the order or manner of planting Roses, it is something different, either according to their nature, or at least according to the common practice of Gardeners, as the Musk-rose is usually planted by House-sides, or Walls, it being apt to run high, as also by its warm Situation it continues the longer in its flowering, it being naturally a late flowering Rose; red Roses are sometimes planted one, two or three Plants together on borders, among other small standards of Gooseberries, Currans, &c. but most commonly by themselves on borders, either in one, two or three rows on a border; the Frankford, as also the White Rose, because apt to spread and run high, is very fit to plant about Arbors, &c. the double yellow rose which bringeth the fewest Roses to perfection of any sort that I know of, doth best against a Wall, or House-side rather, where it hath the advantage of an Eves over it; for in such a Situation I have observed it to bring most Roses to perfection. The Monthly Rose so called, because of its plentiful bearing of Roses for four or five, sometimes six Months together when it is not over much pinch with drowth; the best way is to have of them in divers Situations, especially where they may have warmth and moisture, and then you may have the pleasure of them near the matter as I said, but if you find them too luxurious, it will be your best way to top some of the branches pretty forward if you find they do not knit; for Roses, where they are in an indifferent or midling temper as to the growing or thriving, there they flower most; generally all sorts of Roses are and may be planted in standards on borders or otherwise, as every one likes best; Damask-roses are planted after several fashions, sometimes in fashion of a Head, sometimes in handsom Standards kept staked up, sometimes by Pales-sides, sometimes amongst other Standards of Goose-berries and Currans, on borders, by Walk-sides, or otherwise; but if you have respect to the comely and orderly growing of your Roses, you must keep them ty'd up every

every one to a strait stake, not suffering above one or two Standards from a root, and keeping them clean from succours, and cut in handfom order so soon as they have done bearing, and again before Winter if occasion serve; but where the profit of the Roses is more desired than the compleat order or handfomness, there you may suffer two or three main Standards from a root, only cutting the tops of them once a Year, any time from the time they have done bearing until *February*; also you are to take up all such suckers as run too extravagantly about, which you may plant in other places as occasion serves, only reserving here and there one, as a supply in case any of your Standards grow old, and do not bear so well or so fair Roses as formerly, the which you may cut away and maintain the young in its room, and so save a new planting; but in case your Roses be of any long standing, and decay through the poverty of the ground, then you are to new dig your borders, and supply them with some very rotten dung or good earth, and new cut such roots as you meet with in your digging, not forgetting to cut out all the dead and decayed branches, maintaining only what is likely and thriving; this thorow digging and renewing ought to be done any time in the Winter, until the end of *February*: take notice that Damask-roses especially require a free and open Air, the want whereof is the reason why they bear no better in and very near *London*, only Privince-roses do very well, neither do Damask-roses bear very well in close grounds much over-hung with Trees, although in the Country; the season for cutting your Roses is as I said, so soon as they have done bearing, or any time to the end of *February*, and of some only in some of the twelve days, and some only in *February*, but who so cuts in any of the other seasons shall not err in it; they that cut in *February*, do it that their Roses may not be too forward and apt to be spoiled by frost, but I believe there is more Roses spoiled by drowth than by Frost; know also, that Roses will admit to be cut pretty near without any prejudice to their bearing, and they will bear pretty well where they are not cut at all, if any can abide their cumberfom and unhandfom growing.

Now the means whereby Roses do often flower out of their natural season (besides that Rose which is call'd the Monthly Rose, which as I said before, will be budding and bearing from the time that other Roses blow until the Winter, if drowth or very cold Weather hinder not, to prevent which, some have used Glasses on purpose to hang over the flowers when the Weather grows very cold, whereby their Roses have continued the longer in their flowering) one means

I say is by topping or cutting your Rose-trees a little before they blow, or in the time of their blowing; as also soon after they have done blowing, and then if too much drowth do not hinder, but rather warm and moist Weather, you shall hardly fail of having Roses about *Michaelmas* time, but usually the white Roses of two or three sorts do seldom miss if much springing or warm and moist Weather hit in; there is a small white Rose called *Rosa Pimpinella*, or the Burnet-leav'd-rose, which is very frequent, in flowering twice a Year, if as I said the latter Spring prove not too dry; also by late planting, if they be bearing Plants, they will flower the same Year, but late; but remember as I said, they are furthered by moist Weather; also when they are hindered in their natural Season, by reason of drowth, then they will flower towards the declining of the Year when Spring Weather hits in; also you may have Roses flower late, by Inoculating very early, as I said before, concerning the Monthly Rose, but I have had other Roses do the like, being budded in *April*; I have sometimes budded in *March*, but the Bud was of the former Years growth, and did blow pretty timely the same Summer, indeed it was upon a Monthly Rose that stood very warm, so that the Sap did stir pretty well; the Season for planting of Roses is any time from the fall of the Leaf to the end of *February*; take notice, that it is often very seasonable to remove and Plant some sorts of Roses, even when some other are in their pride of flowering, as the Monthly and Musk Roses, and some others; therefore for such it will be best to stay until it be more seasonable to deal with them, but in case you cannot, or will not wait for a better Season, then your best way is to top them pretty near, and plant them as speedily as you can, not suffering either Wind or Sun to come to their roots, for you must know, that a Tree taken up whilst the Sap is stirring, will take more hurt in one hour, than one seasonably taken up will in two or three days or more above ground.

Of Goose-berries.

GOOSE-berries are encreased either by suckers springing from the roots of the old, or by layers or moulding them up, or by branches or shoots cut off and set; they will grow likewise of the Seeds being sown; as soon as they be full ripe; the Seeds are to be taken out and washed, or otherwise; but it is needless practice; being they are so apt to be encreased otherwise; the order of planting them is as I said of Roses, in Standards on borders at four or five foot distance, either more or less as every one liketh, either of themselves,
or

or mixed with other Standards of like growth; the suckers are to be taken from the roots every Winter at least, only reserving one or two where occasion requires, as a supply in case the Mother-plant grows old or decays either in bearing or goodness of Fruit, it will be worth the while once a Year to trim them and cut out the dead or old decaying branches, or other under and unprofitable shoots, by which means your Fruit will be fair and good; they are sometimes planted in form of an hedge, but then you cannot expect either so much or so good Fruit. The Season for planting and increasing, is from the fall of the Leaf, to the rising of the Sap again, there is at least seven or eight sorts good.

Of Currans.

WHat is said of Goose-berries, may in every respect be said and performed of Currans, only take notice that the white Curran doth bear more constant and better against a Wall or Pale, than in Standards, although they have but little Sun, yet the more the better, both for earliness and goodness of taste.

Of Rasp berries.

They are planted after the manner of red Roses, either two or three rows on a border, either in the Sun or shade; yet as I said before, the Sun gives a more pleasant relish to any Fruit than the shade; also the better the ground, the fairer and more plentiful will your Fruit be; they are increased of suckers, which spring from the Elder Plants, they usually bear the same Year they are planted, if drowth or too late planting hinder not; the constant order is, that what bears this Year, dies after bearing, and what springs new this Year bears the next; as for cutting of them, you need cut no more of them, than to make them grow a little handsom, and it may be the Fruit will be the fairer; cutting too low, waists some Fruit you might have had, and your Plants never the worse; if you love to be neat, you may cut or break out all the dead stalks from among the living; the dead of the Winter is best to do it in, the Season for planting is the same with Goose-berries and Currans.

Of Filberds, and Barberries or Piprises.

I Set them together because their encrease, order of planting and Husbandry is alike; they are encreased of suckers, which they do bring forth in great plenty, the which should be diligently taken every

every Winter at least, having a care not to perish the old root, only leaving two or three principal Standards for bearing; the order of planting is in strait ranges about four or five foot asunder or more, and sometimes thicker, either on the outsides of Orchards or otherwise; they are sometimes planted of short sets, sometimes of a taller stature, as every one liketh, or can procure; and as the old Trees decay, you are to nurse up one or two young ones from a root to supply in the place of the old, and so save a new planting, the red Filberds are accounted the best, the Season is from the fall of the Leaf, to the end of *February*, but generally the head of the Season is best and surest; still remember that in all planting of Trees or Shrubs, the roots are to be topt or pruned, and the head likewise as need requireth, little or much.

Figs

ARE encreased by cuttings or branches, also by suckers or by layers, they are to be planted against a House or Wall, &c. where they may have some convenient Sun to ripen them; the Season is the same with the fore-mentioned sorts of Fruit; there are three very good sorts, they are to be tack'd against a Wall, as Peaches, &c. but prune no more than needs must.

Walnuts.

They are only encreased by setting of the Nuts, the which are to be set any time in the Winter, but the surest and best way, is to keep your Nuts in some mould in some convenient place, not too dry, and then some time in *February*, by which time they begin to spire for root, you are to set them in some good ground not too hot and dry; set them about half a foot asunder or thereabouts, and after a Year or two growth, you may take them up and cut the top or down-right root, and plant them in some thinner order, where they may grow until they be of sufficient growth or stature to be planted, where they may continue to bear Fruit; some in setting the Nuts, and also in planting of young Trees, use to put a Tile or some such thing to prevent its top or down-right root; the truth is, that although the top root be cut, yet many of them will gather the like root again; therefore it will be your best way only to top the ends of each root a little, and to spread them what you can in breadth, and as shallow as you may conveniently, for it is the top root, and the want of sufficient shallow spreading roots, that is the cause why they

they are so long before they bear Fruit, there are divers sorts of Walnuts, but those that are largest and thinnest shell'd are best; after they are of convenient growth, they may be Inoculated as well as other Fruit, the which will occasion your Trees to bear Fruit something the sooner; the Season to plant them, is the same with other Fruit-trees.

Chestnuts.

THeir encrease and Husbandry, is the same with Walnuts, if any odds be, the Chestnuts are a little the tenderer; I have set of the Nuts in *March*, and they have grown very well, but if kept in earth as I said of Walnuts, it is the best way.

There is another sort more choice or rare, call'd the Horse Chestnut, and is encreased as the ordinary sort, both of Nuts and by laying.

Quinces

AR E encreased both of suckers, layers or branches, and they may be Grafted and Inoculated as other Fruit, although but seldom practised, but will come to bear the sooner, for they are generally very bad bearing Fruit in most places, but for the most part they bear best where they have a moist Situation, as near a Sink, &c. there are divers sorts.

Mulberries

AR E chiefly encreased by laying or moulding up convenient branches, sometimes they will grow being set of branches or slips; also they will grow of the Seed, when the berries are ripe, they are to be bruised in your Hands and wash'd, and being dry'd, you are to sow them, either on beds made very good, and covered about an inch thick with fine mould, or you may sow them in Pots or Boxes, in some temperate Situation, and after a Year, or rather two Years growth, you may take them up, prune their roots, and plant them in some thinner order, they are to be sown in *September*, at which time they are full ripe; the Season for planting them, is the same with other Trees that shed their leaves.

Cornelion Plum or Cherry

IS encreased by laying, sometimes they will grow of slips or branches, also of the stones, but they will sometimes lie two Years before they spring out of the ground.

Med-

Medlar Trees

AR E increased only by Grafting, either on the Pear-stock, which is best, or on Quince-stocks; also on the white bush or Hawthorn, it is not worth the while to sow the Seeds or Kernels. Service-trees are plentiful in divers Woods,

The Line or Linden Trees, with which I will conclude.

IS increased chiefly by laying down the branches, and sometimes by setting the slips or branches; they will grow of the Seed sown about the Month of *September*, I have seen pretty store under some Trees, that came up of Seed falling from the Tree, if you can get some Seed, which indeed is not very plentiful, you may sow it after the manner as Mulberry-seed is to be, to which direction I refer.

The Names of several Trees fit to Plant by Out-Walk sides, or otherwise.

W Alnuts
 Chesnuts
 Service-trees
 Black or Honey Cherries
 Lime-trees
 Siccamores
 Birch-trees
 Elm-trees
 Cherry-trees
 Mulberries
 Ash-trees
 Horn-beam
 Beach

Apple and } that bear hard last-
 Pear Trees } ing Fruit

Oak-trees

The Abeal-tree, if the ground be moist

White Poplar and Willow, if near Water

There are several other sorts of Trees that are fit for the afore-said purpose; as Fir-trees, wild Pine-trees, &c. but let the mentioning of these suffice at present.

Here follows a Catalogue of divers sorts of Fruit, which I had of my very Loving Friend Captain Garrie, Dwelling at the great Nursery between Spittle-Fields and White-Chappel, a very Eminent and Ingenious Nursery-Man, who can furnish any that desireth, with any of the sorts here after mentioned; as also with divers other rare and choice Plants.

The Names of divers sorts of Cherries.

THE May
 Early Flanders

Duke

Flanders

Luke-wards

Black Orleance

Heart-lip

Curan or Bleeding
 Heart

Great Black-heart

Red-

Red-heart
White-heart
Spanish-white
Carnation
Great-bearing, or
great Murry
Agriote, or Murello
Tradeskants
Spanish or Blank Flan-
ders
Flanders Cluster
Prince Royal or Great
Flanders
Double-blossom of
two sorts
English Ciliegiberry-
lin, as big as an in-
different Apple
Portingale
Cornelion
Amber
Moroccow, or Moref-
cow

*The Names of divers
sorts of Plums.*

Mirabilons, red
and white
Primordians
The Amber
Red
Blew
Moroccow
Violet
Fardigon
Black and White
Matchless
Mussel
Black
White
Red

Turky
Amber
Pruncola
White and Black
Date red and white
Bona Magna,
Or Spanish Plum
Imperial
Verdocha
Hungarian
Green-Osterly
Orange
Marble-plum
Pear-plums
Black
White
Pescod 2 or 3 sorts
Bullin
Damascens 2 or 3 sorts
Queen-Mother
Cofferers
Prune-damson
Padrigon, or Damas-
kens
Demie
Kings
Queens
Christian, or Nutmeg
White-bully's
Damson

*The Names of several
sorts of Apricocks.*

THE Alger, or Ci-
vet
Masculine
Orange
Roman
Ordinary
The great Turkey

H

*The Names of divers
sorts of Nectarins.*

TAwny
Painted
Murry
Roman-red
Baltard-red
Scarlet
Ruslet
Green two sorts
Yellow comes clean
from the stone
Garles Nectarin
White Nectarin

*The Names of divers
sorts of Peaches.*

Persian
Murellow
Nutmeg both white
and red
Purple
Modena
Orleance
Savoy
Navarr
Magdalen
Alburge
Newington
Bellows or Bellis
Musk Violet, or Violet
Muscate
Princes
Superintendent, it
parts and is red at
the stone
Bell-cheveries
Rumbullion
Smirna
Peach peccant excel-
lent

Depo

Depo
White-monfier
Bloody-monfier
Black-peach
Grand-Carnation
Portingale
Golding
Roman
Slane
Hollmans
Virona
Coleraine
Arundel
Malecotone
Deroy
Double-blossom
Island-man
Queens
Grand-Duke
Brignal

Grapes.

ORlence
Allegant
White-muscadine
Red-muscadine
Parfly-leav'd
Black Curan-grape
without stones
White Curan-grape
Blew Frontignate, or
Muscate
White Frontignate, or
Muscate
Rayfon-grape
Grea-burlate

Figs.

BLew-spanish
Great-blew
White

Fig of Marcelles
The little yellow
The tawny fig

Apples.

Pippins
Great-golding
Small-golding or bay-
ford
Kentish
Kirten
Ruffet
Green
White Preserving Bel-
lebone
Holland or Dutch
Musk
Carmel
Roman
Carlile
Italian
French
Winter-lasting
Summer-pippin
Black-pippin
Renets
Golding
Lincolnshire
Ruffet
Ken-ish-ren
Ruffetings
Gouldings
Blandring
Pear
Red-ruffet
Harm-ruffet
Harvie
Royal-pearmain
Winter
Summer-pearmain
Royal-apple

Queenings
White
Red
Bastard
Genetings
Marger-apple
Famgustion
Pome-water
Marygold-stoken
Winter-stoken
Sage-apple
Rose-apple
Flower of Kent
Winter braudin
Davy-apple
Davy-gentile
Old wife
Gaunt-apple
French-bovillion
Kentish-codling
Henretta-Marya
Kitchen-apple
Gilly-flower
Powel-apple
Pigs-shout
Rich-pomorum
White-Costard Gray
Red-Costard
Black-apple
Pome-paris
Rybon
Hubard
Violet
Sir Michael Stannup's
apple
Pome-ray
Cotten-apple
Seek no Father
Angels-bit
Mrs. Clemen's-apple
Boulton-greening
Dutch

Dutch Cap-apple
John-apple
Orange-apple
Lordin
Cider-apple
Elliot-apple
Genet-moyle
Red-streak
Red-reed-streek

Pears.

Primatin, or Primitive Pear
Early-chisel
Brunswick
Carval
Geneting-pear
Green-chisel
Marget
Pear-twice
Sand-pear
Okenbury, or Green-windfor
Windfor
Sliper
Ruffet-katherine
Yellow-katherine
King-katherine
Winter-katherine
Burgamots
The Oringe
Summer
Winter
Hamdens
Burgamot-debuga
Soveraign-pear
Summer-boncretien
Winter-boncretien
Yellow-boncretien
Winter-windfor

Bura-de-roy
Great-bura
Gray-bura
Double-headed
Dionere
Double-blossom
Mater-John
Lewis
Bishops-censer
Pound-pear
Chester
Winter-musk
Portingale
Diego
Doves
Malbone
Colvale
Greenfield
Winter-greenfield
Slipper-pear
Norwich
Pigs-tale
Coker
Kings-pear
Queens-pear
Liquor-bit
Grifford
White-robert
Swallow-pear
Rosalent
Ladies-buttock
Sugar
None-such
Emperors
Painted-pear
French-warden
Spanish-warden
English-warden
Great-red-warden
Parkinson's-warden

Winter-musk
Sweet-william
Violet
Lordin
Bishops-tongues
Ruffet-poperin
Green-poperin
Great-poperin
Black-pear of Worcest-
ster
Sherbone-pear
Cornie-pear
Mrs. *Clim's*-pear
Collerashaw
Amadat
Deadman-pear
Mullibush-pear
Digby
Mompelier, a great
Winter-pear
Bareland
Burning-pear
Gilly-flower
Lysumber
Longevel
Garrets
Winter-halling
Half-spawn
Bell
Pettworth
Purgin
Bell-bone
Quince
Monsieur-John
Roth-pear
Quinces
Apple-portingale
Pear-portingale
Barbury
English

Of the Ordering of the

KITCHIN GARDEN.

And first of the Sowing of Pease.

TAke notice, that the earliest sorts are for the most part as hardy, if not more hardy, than the most ordinary Field Pease; they are sown after the manner of Field-Pease, or which is most suitable to our purpose, having only a design of laying down rules or directions proper to Gardening; you are to Dig your ground, or if it be much, and lie convenient, you may Plough it very well and Harrow it, and then you may, as some do, with a kind of a Plough call'd a Drill, (as I think) and one Horse to draw it, make several trenches or gutters about a foot and a half asunder, or less if the ground be not very rich, and about three inches deep, in the which you may sow your Pease, covering them with a Rake. I suppose a quart of ordinary white Pease may sow about a Pole of ground, or if you sow Pease in some small quantity, as in a private Garden, it will be your best and handsomest way to range a line or two, and with the corner of a Howe to make your trails or gutters about such a distance as aforesaid; the reason of this order is that you may the better go between them to gather your Pease without treading on them; also you may, observing this order, go between and cut up the Weeds, and mould up your Pease with a Howe as occasion serves; you are to be careful that you cover your Pease very well, and avoid scattering of any besides, lest it occasion the Mice to search farther, and meet with your Pease; know also that you are to sow your Pease something thicker, when they are to undergo the hazards of a Winter, then you need when you sow them in the Spring. After the same fashion you are to sow Rouncifal Pease, but a great deal thinner, and the spaces wider, because

cause they grow a great deal larger, especially the great Maple; also they must be well stuck with sticks of a good length, especially if the ground be very good, or that they grow under or near high Trees or Hedges, which will cause them to run up the higher; two rows of sticks may serve for three rows of Pease, incline the heads of your sticks inward towards one another, that you may the better pass amongst them; if they be not stuck well they will not bear so well, and will be apt to rot, especially if the Weather should prove very moist when they are well grown, and indeed other sorts of Pease, if sown on very rich ground, or in close places amongst Trees, ought to be stuck; take notice that indifferent thin sowing and good sticking are very necessary means to have good Crops of Pease, in such Situations, some observe in small Garden-ground, to set the Rounce-fal Pease about three or four inches asunder, making three rows on a yard-wide bed, and stick them well, and if you set or sow your Pease something too thick, then you may (when the danger of miscarriage by hard Weather, &c. is past) take up what you think will be too many to stand in that place, and set them in some other, and they will do as well as those that remain unremoved, only Water them at their first planting; take notice that those Pease you sow very early, require a pretty warm Situation; and rather dry than moist; also forget not after they are about three or four inches high, to dab up the mould a little to your Pease on each side of them with a Howe, cutting up the Weeds likewise, if any be amongst them. Know also, that it is not convenient to bestow either dung or soil on your Pease-ground, except it be very poor, not only in respect of your Pease, which will ripen soonest on an indifferent midling ground, but in regard of the Crop of Turneps which you may have after your Pease are ripe and gone, which are best and sweetest when they grow on a ground not very rich or forc't with dung. The Season to sow your Pease, is about *Alhallontide*, either a little before or a little after for the forwardest. And likewise from *February*, until the end of *April*, sometimes in *May*, if of a very quick kind, as Hot-spurs or the like, the which sorts being sown in the Spring on an indifferent ground, I mean not too rich, nor very poor, may bring Peascods fit to gather in eight or nine Weeks, if excess of wet hinder not, or the ground is not of a cold or wet nature.

Beans are to be set about a foot or somewhat more asunder every way, especially if the ground be rich, or much over-shadowed with Trees or high Hedges, or they may be sown or set in the form as Pease in trails or gutters, allowing about a foot and a half between each

each row, and setting your Beans about half a foot asunder; be careful to cover them well, lest the Mice disappoint you of part of your Crop; be careful to keep your ground clean from Weeds amongst your Beans with a good sharp Howe, as oft as occasion requires. Some top their Beans whilst they are very young as about half a foot high, the which may occasion them to branch the better, and so yield the more profit; but where this good Husbandry is used, your Beans must not be set too thick or near together. Others do not top their Beans until they be about two foot high or more, to the end their Beans may ripen the better together, that so they may have their Crop off in good time, that they may sow their ground with Turneps; others so soon as they have the chiefest of their Crop off, do cut their Bean-stalks within a little of the ground, which often occasions a new Crop from the same Beans. The Season for setting Beans, is from *Albhalland tide* to the end of *May*, but most commonly in *February* and *March* in private Gardens; there is but few sets in *December* and *February*, except the Weather be very mild.

Of the Sowing of Parsnips and Carrots, &c.

First, you are to take care, that your ground be competently rich or hearty for the purpose, if not to bestow some dung or soil thereon, that so you may not dig and sow to no purpose, if your ground be of a stiff or cloungy nature, it will be your best way to trench it at least a spit, a paring and a shovelling; so likewise if it be weedy and sowre, and in your trenching to lay your ground in ridges, it will mellow and sweeten the better. The order or manner is, first to make a trench (where you are to begin to dig) about two foot wide or more, and of what length you think fit, and so to observe a constant order both for breadth and depth, and then where the next trench is to be, first pare in the Weeds or upper part of the ground only the breadth your trench is to be, and sling it into the bottom of your first trench, and then dig and turn your spits, filling up your former trench, and after shovel up the crums, and lay them on the top, and so continue a constant order until you have trench'd what you will; if you see cause, and your ground will bear it, you may dig your ground two spits deep, and then in the spring, when you are to sow your ground, you are to level it, digging it about half a spit deep or less, rather than turn up any Weeds, &c. Some do only dig their ground in the Winter but single spit, and then when they stir it in the Spring to sow, they are apt to turn the Weeds or top of their ground up again, which causeth the Weeds
to

to multiply and spring up before their Crop; but if your ground be mellow and for ordinary uses, you may only pare the Weeds clean, and so let it rest until the Spring, and then dig it when you are to sow it, only if need require you may spread your dung on it, and let it lie all the Winter; but they that have much ground to dig and sow, find a great convenience in trenching and making as much ground ready against the spring as may be, besides the benefit of mellowing and sweetning it. Another thing I would have you take notice of, and that is that you do not sow one sort of Crop too often upon one and the same piece of ground, but sow it with changeable Crops, especially Parsnips and Carrots, the which being sown too often without change, will be apt to Canker, rot, or be very apt to be Worm-eaten, although the ground be maintained very rich. I do not speak this of the great-garden grounds in or near *London*, where their grounds are in a manner made new and fresh once in two or three Years, by dung and soil and good trenching; so that their ground is as it were new and fresh for one and the same kind of Crops every Year. Again, if the ground be Green-sward ground your care must be to take but thin spits, and cut or break it well, especially if you intend it for roots the same Year, of you may observe a kind of trenching, by paring the sward into the trench, and so digging your ground in order with thin spits; if it be of a stiff nature, it will be your best way to let it have the benefit of the Winter Frost to mellow or sweeten it, and then it will likewise work the better when you come to sow it; you are to consider of what nature and temper ground is, for there are some sorts that are of a kind of stiff or cloungy nature, and will not fall smooth and handfom under the Rake, except it hath lain three or four days after the digging, for such ground you must defer your sowing until you find your ground will rake. And so on the contrary, some grounds will bake and lie ruff, if they be not sown quickly after it is digged; but in all grounds it is best to sow, rather in a dry time, than in a moist, if it be raked or trod in a wet time, they will be apt to bake or bind, so as your Seed cannot get out of the ground: the manner of sowing your Parsnips, Carrots or Onions is, having prepared your ground, you are if it be to be sown in great quarters, and not trod into beds, first with a Howe, or any other convenient thing, to mark or trace it out into several slips or spaces, of such a bredth as you think fit for your sowing, whether brand-cast or otherwise; your traces are a rule to you, that you may sow your ground in order and miss none, neither sow any twice, which is apt to be done when one sows by guess.

guess. Sow your Seed as equal as you can, but be careful you do not sow too thick, but yet better a little too thick than too thin, for you may help too thick when you cannot add where any is wanting: and then you are to rake it only so as to cover your Seed, the which twice in a place may be sufficient, that is, once from you, and lightly back again in the same place; but if you do bestow more raking, you are to do it so lightly as not to uncover your Seed again; but if your ground be sandy, or other very light ground, it will not be your worst way to tread it all over, leaving a very little distance between every footing, and by so doing, you may both cover your Seed better, and make your work the handsomer; they that sow a great deal, may in the stead of raking it by hand, harrow in their Seed; but if you love to see your work lie very level and smooth, be careful to level well before you sow, lest by endeavouring to bring that to pass afterwards, you rake your Seeds in heaps. You are in case your ground be of a clungy or stiff nature, to break the clods with more labour and diligence, lest if it lie over rust, you bury your Seed, or be more troubled to rake your ground when it is sown; they that have but a little to sow, and if it be of such a nature as it will not rake, they must cover their Seed by spitting it in with a Spade; it is likewise a sure and good way to spittle in Seed where the ground is very light and apt to fall smooth, for by spitting you may be sure to cover your Seed well, and thereby save a Week or a Fortnights growth, in case a dry Season should happen upon the sowing of your Seed. You may mix a little Lettice-seed with your Parsnip or Carrot seed; take heed you do not put in too much, lest you do spoil your Roots, for they will hinder very much if over-many; or you may put a few Carrot-seed amongst your Parsnips, and so on the contrary. Also if your ground be very rich, you may sprinkle a few Radish-seed amongst your Roots.

The Season for sowing your Parsnips is either in *February* or *March*, for it is a very hardy Seed, but yet would not be sown later than *March*, for it doth lie a pretty while in the ground before it spring: I have known some sow Parsnips in the beginning of *November*, and sometimes in *October*, and do very well; but from *February* to mid-*March* is a very sure and good Season.

Carrots may be sown from *February* to the end of *April*, but if you begin in *February*, the ground ought not to be of a cold or wet constitution, the middle of *March* is a very sure and good Season. The next thing to be considered is that after your Roots are come up about two or three inches above ground, defer not to weed them, if
 . sooner

sooner the better ; for if they should be much over-grown and stunted for want of timely weeding or sizing, they will never amount to that profit or goodness which otherwise they might have done by timely and good Husbandry ; within a short time after they are weeded, before they smother one another, you are to size them, by plucking up, or which is better, by the use of a sharp Howe to cut up, leaving none nearer than a good span asunder or thereabout, and by performing this Husbandry pretty timely, both your labour will be less, and your profit more ; if your ground be very rich, you are to give the more distance, because the tops or blades will be so rank that they will much hinder one another in thriving in the roots.

Onions may be sown either in *February, March* or *April*, for to dry, to be spent all the Winter after, but to use green in Sallets, &c. you may sow from *April* to the end of *August*. Let them be timely weeded, and likewise sized, by pulling them up where they grow too thick, that they may be about three Fingers or near a Hand breadth asunder, if you desire to have your Onions great, which they will be, if the ground be good, and timely thinned as aforesaid. You may sow a few Leek-seeds amongst them, if you desire to have them great ; and then if you desire to improve them farther, you may take them up, and lay them pretty deep, and according to their depth, they will white and grow larger if the ground be rich ; you may lay them when your Onions are ripe or somewhat after, you may if you will scatter a few Parsnip, Carrot, or Radish Seeds amongst your Onions ; they will be great, and a few will do no hurt or hindrance to your Onions. You may observe the same order for sowing Onions, as of other Roots, either on beds or larger pieces of ground, either spited in, or trod and raked.

Of Turnips and their Ordering.

They are usually sown on the same ground where forward Pease or Beans grew, they spend sweetest being sown on an indifferent middling ground, for being sown either too early, or on ground very rich, they spend either strong or bitter, and many of them are apt to rot ; they prove very good, being sown on a fallow intended for Barley, &c. The best Seasons to sow them in, is from the beginning or middle of *June*, to the middle of *July*, it is not very sure to sow later ; they are likewise sown in *March, April*, and *May*, for forward spending ; but as they are oft subject to miscarry, being sown so early, so on the other hand they seldom spend very well, or if they do, they last good but a little while ; it is a usual thing to sow

twice or thrice some Years before they take, by reason of a small Bug called the Garden-flea, and there is no remedy but patience and sowing again. The order of sowing is, if you Plough your ground for them, you are to harrow it once in a place before you sow, and then harrow it once or twice in a place, as need requires, to make it lie fine and smooth; it will be the easier and better to Howe when the Turneps come up. They are sown either Brand-cast or otherwise; the quantity of Seed which may serve an Acre of ground, is a Pound and an half, but with most three Pound is sown upon an Acre. They are to be sized as other Roots, rather wider asunder than less, about eight or nine inches is a good convenient scantling; it is the Season of the Year or the difference of ground, which makes the difference either in goodness or badness of Turneps; for as I said, the too early sowing causeth them to spend strong or sticky, so likewise their being sown in ground too rich, will make them spend very strong, and many, both too early sown, and on too rich a ground, will cause many of them to run down like Rapes, whereas the same sort of Seed sown seasonably on an indifferent midling ground, they will both spend sweet, and keep to their kind; as to the shape, there are several sorts of Turneps, and all good, but the red sided is generally most accounted, for the sweetest and best to sow early; but the yellow Turnep spends driest and firmest; the long is the most watry, but a good sweet Root; there are other good sorts, but let this be sufficient for the ordering of Turneps, &c.

Of Radishes and their Ordering.

Who so desireth to have Radishes good and betimes, must make his ground very good, otherwise they will be Worm-eaten, and run up to Seed, and never be fit to eat. The order of preparing the ground, is as followeth; first, if you desire to begin very timely, as in *January* and beginning of *February*, you are to make choice of a warm Situated place, and then to provide a pretty quantity of green or new Stable dung and litter together, according to the quantity of ground you intend to sow; for if it be for the use of a private Family, a little bed at a time will be sufficient, for they that desire to have them all the Spring and Summer, must be sowing every Fortnight according to their spending: being provided as aforesaid, you are to trench in your dung in some pretty quantity, and in such order, that the dung of one trench may touch the dung of the next, that your ground may be Husbanded every where alike; as for the depth, you may use your discretion, and as your ground will bear, for

for if your dung be covered but half a foot thick with mould, it may be sufficient for the purpose; but if you will not be at the cost of trenching, good digging may serve, laying your ground in good order, and breaking the clods as occasion requires; and if you cannot get new Stable-dung, which is best for this purpose, then any old Straw, or old cast Hay, or any other dung you can get, yet the lightest is best for trenching, and the rottenest to dig in an ordinary way, but if your ground be not very good at present for your purpose, your best and surest way is, after you have trench'd or digged it, to scatter some very rotten dung converted to mould, or the bottom of a Wood-stack, or some Lime-rubbish of old Walls, well cleansed from Bricks, or the like, whereby your ground will be fit for the aforesaid purpose, or any the like; your ground being made ready as aforesaid, and the Season come, you are to sow your Seed pretty thick, either on beds or larger quarters, if on beds or borders, your best way is to spittle it in, turning your hand in the working, so as to cover your Seed, and then to smooth it over either with a Rake, or the back of your Spade; but if you sow greater quantities, then you are, as I formerly said of Carrots, to tread in your Seed, and then lightly to Rake it over; be careful to sow and tread your ground in a dry day lest it bind.

When your Radishes are come up, and the danger of miscarriage by hard Weather and the Birds be past, you are to cull or thin them, that they may stand about three Fingers breadth asunder or thereabout, which may be sufficient for the more forward sowings; but for the more later sowings, they must have more distance, because the tops or leaves will grow more rank and large, and will cause them to neck for Seed before they are come to any convenient size for use; so likewise if your later sowings are near Hedges, or the like, they will be apt to run up and neck before they are good for any thing, therefore let them have the more distance given them.

Take notice, that the more early sowings do commonly take better than the middling, I mean, of *March* or *April*; because then the Sun begins to have some power, and the ground is apt to be dryer; but the chief reason is, then the Garden-fly is very brief, which will destroy or stunt them without often watering, and so more and more, till *May* be past, except the Weather prevent; but in case of dry Weather, you must ply your Radishes with Water, and in so doing, your Radishes will get strength, and be out of the danger of the fly quickly; also your care must be to keep the Chaffinches from your Radishes, chiefly at the first springing out of the ground, for they

will pull them up, and eat only the two first leaves that peep, whereby you may quickly lose your Crop of Radishes; for prevention you are to shoot some of those kind of Birds, and pull them, and scatter their Heads and Feathers all about where you sow your Seed, and so long as they keep fresh, those Birds will not trouble you, but be sure to strew new Feathers as you see occasion, until your Crop be well come up, and the leaves spread, and then they will not meddle with them; you may if you will, and if your ground be sufficient, have a Crop of Carrots or Parsnips on the same ground amongst your Radishes, but then you must be sure to cull them betimes, and give them the better distance; as also to draw them off as soon as they are ready, lest you spoil your other Crop: Take notice, that although I said, speaking of the preparing of your ground, that half a foot thickness of mould might be sufficient above the dung for Radishes, yet if you intend a Crop of Parsnips or Carrots amongst them, then it is best to allow an ordinary spit deep of mould above your trench dung if it be very new; the Season for sowing is, as I said, from *January* until *September*, if any desire to have them so late; but it is only the black Radish that is sown so late, and only of some few for *Autumn* or *Winter* spending: Take notice, that Radishes sown after the midst of *June*, do not run up to Seed as the forwards sowings do.

Lettice is very hardy, and may be sown as early and as late as Radishes, either on Heads alone, or thinly scattered amongst other things, as Beans, Carrots; and if you desire to have some Cabbage, they must be sown thin, or quickly to cull them a good distance asunder, and in so doing, you may have your desire if your kind be right for the purpose; they that love them, must sow them often, because the first sowings will soon run up to Seed.

Spinage is sown both early and late, and is very hardy; they that desire to have it all the Summer for their use, must sow it very often for it quickly runs up to Seed in the Spring and Summer Months; if you would have it grow very large, then your best way is to sow it very thin, or stray amongst other convenient Crops, where it may not spoil other things, or on beds alone, or trails on the Hedges of other beds: It is usually sown about *James-tide* or *Bartholomew-tide*, to use in the Winter or Spring, and usually doth not run up to Seed so soon as that which is sown early in the Spring.

Garden Cresses and Charvil are sown very often in the Spring and Summer Months, to use together as a very acceptable Sallet to many; also Charvil is sown about *James-tide* or *Bartholomew*, to use in the Spring, and of some it is sown oft on hot beds to use in the Winter.

Corn

CornSallet is sown about *James-tide* or sooner, to use in the Spring chiefly.

Sweet Chervil, the Seed is best set or sown as soon as it is ripe, but if sown in the Spring, it may chance to lie in the ground until the Spring following.

Purslane is sown in *April* or *May*, it is something tender; they that would have it betimes, must make a hot bed for it, after the manner of a Cowcumber-bed, or sow it on a Cowcumber-bed after the Cowcumbers are planted out, it loves a pretty deal of Water in dry Weather; if you would have it grow great for to pickle, you must draw it up when it is about two or three inches high, and pick it out pretty thin in good ground, keeping it moist, especially at first planting out, many times it will be as forward to cut for use, being sown about the end of *April*, or beginning of *May*, as that which is sown in mid-*March* without a hot bed, if it be helpt with often watering, in case of dry Weather.

Alifanders are sown about *Midsummer* or later, to be spent in the Spring; chiefly in Lent, as soon as the Seed is ripe, is a sure and good time, sow them in any by-place, although it be something shady.

Red Beets are sown in the Spring, either stray amongst your Onions, or other Roots, or the Seed prick out on Beds pretty thin, that they may be great to use for Sallets, or to garnish Dishes: And

Skerrets require a rich ground, inclining rather to moisture than drought; they are sown of Seed very thin amongst other things in *February* or *March*; but the surest way in ordinary grounds, is to set them of slips, being parted as single as may be, and set on the edges of your Onion-beds, or about half a foot or more, which is best, asunder on beds by themselves in ground that is good, for then they will be fit for use the Winter and Lent following; if they be set too thick, or above one slip in a place, they will starve one another; they are apt to Canker, and therefore require fresh and well seasoned ground by Winter Husbandry. Scorzonera, or Vipers grass; the roots are used by some, as Skerrets or Parsnips, they are encreased either by sowing the Seeds, or by parting and setting the tops of the roots when the roots are taken up for use; also the roots being cut or broken into several pieces and set in good ground, not over dry, will in short time yield considerable encrease; about 8 or 9 inches asunder is a convenient distance: They are held to be very cordial and excellent in Fevers, as I have had experience thereof several times; the Spring is the best Season, yet I have set of them most times in the Year with good success.

Horse-

Horfe-radish is increased by setting the upper part or tops of the root, and by sprouts spreading from the elder roots, also by pieces of roots left in the ground accidentally, or purposely cut or broken off for that purpose; they have a large Season, even from one end of the Year to the other; chiefly the Spring, the better the ground, the speedier will your profit be.

Tarragon is encreased by setting the tops or slips, but best and soonest by sprouts that run from the roots, which it doth yield in-different plentiful if the ground be good; if the tops or stalks be cut down towards the Winter, and a little rotten dung laid on it, it will cause it to spring the lustier and better in the Spring, when it is chiefly in use either of it self, with Oil, or amongst other Sallet-herbs: The Season is the Spring, if you set it of tops or branches, keep it moist until it hath taken root.

French or Kidney Beans may be set any time, from the beginning of *April*, to the middle of *May*; they are something tender, therefore they that would sow them to have them with the first, are to sow them on a pretty warm bed, or so as you may defend them in case of cold, or cold wet Weather; and when the Weather is pretty mild they may plant them out in ranges or rows, about seven or eight inches or less asunder, and about fifteen plant-inches between each row, and to water them at first planting; they are very apt to grow if the Weather be warm, and when they are well taken, you may stick them with pretty tall sticks if the ground be very good, two rows of sticks to three rows of Beans, or you may stick a few shorter sticks in the middle row; if you love such kinds of Fruit as this, then it will be a very good way to provide your self of that sort of Pease called

Sugar Pease, which is to be drest and eaten after the same manner as French Beans, and may be sown earlier, and be fit to spend before the French Beans are ready; you may sow them in *February* or *March*, and stick them as French Beans: Both these and French Beans being gathered young, spend the sweeter and better.

The gray kind I take to be the best.

White or curled Endive, if it be sown to Still, and that you may save Seed of it, the Spring is the Season; but if to white and use in *Autumn* and beginning of Winter for Sallet, as it is most commonly, then your Season is from the middle of *June* to the end of *July*, not much later on good ground, and not very thick, that so it may grow the larger, and come on the quicker, and then as you have occasion, or as the Season requires, you may white it any of these ways follow-

following: first dig or trench a piece of ground, according to the quantity you desire to white, and then by a line for order and handsomness, with such a stick as we usually set Beans, make holes, and having gathered the leaves of each Plant together in your Hand, set it up to the very top of the leaves, and by planting it pretty near together you will save ground, and the setting of one Plant will be the closing of the former, and save some labour, and by this means you may quickly have it for your use: Another way is, first sow your Seed on a bed or stay amongst other props, and when it is grown up about a handful high or less, you may Plant it in order on beds not too thick, but so as it may grow large, the ground must be very good for the purpose, and when the Season draws near to use it, on a dry day, when your Plants are dry, you may gather the top of each Plant together, and tie them pretty close with a piece of Bass, and in a little time the inmost part of your Plant will be white and crisp, and fit for use; these ways are sure and good, if too much wet do not spoil and cause it to rot; some do white their Endive and other sorts of Sallet of like use by laying them in Sand or Earth, either within or without Doors, some by covering their Herbs with dung or litter, which if tied up first, will be something better. By these means or such like, divers sorts of Herbs are or may be whited, as Sellony or Smallage, sweet Parsley, Cardones, Succory, &c. where-by it is made more crisp and acceptable to many.

Cabbages and Colwarts are sown of Seed between *James-tide* and *Bartholomew-tide*, also in *February* and *March*, but those sown about *James-tide* are for the most part more sure, and earlier in Cabbaging; but yet if your Seed be of the early kind, they will come to perfection very quick, although sown in the Spring. The ordering of them is, after they are come up about a handful high or less, (whether they were sown on beds together, or astray amongst other Crops, as Turneps, or *Michaelmas* Onions as they are called) they are to be drawn up and set in some thinner order, either set or laid up, to the setting on of the leaves, in rows, about six inches between each row, and about four or five inches asunder, and so to remain until the Spring, and then in *February*, *March*, *April*, or *May*, you may take them up, and plant them in some thinner order, where they may Cabbage; you must dung the ground pretty well where you plant them, either on the edges of your quarters where you sow your Carrots, or, which is in my judgment better, in a quarter or piece of ground together by themselves, about three foot asunder or little less, and when they are pretty well grown, and the Weeds are some-

somewhat grown up amongst them, you are with a Howe to cut up the Weeds, and draw them up round about each Plant with your Howe, the which will be some advantage to your Cabbages as well as the ground; those which are sown in the Spring or rising of the Year, are to be raised on a hot bed, or amongst your earliest sown Sallet, otherwise they will not Cabbage to any good purpose, except they be of the *Dutch* or earliest sorts; yet this advantage you will have by your Summer Plants, they will continue green and sound when your Winter Plants are perished and gone by the Winters Frost, and their more forward growing to perfection; you are to see to your Seed when it is coming up both the early and the later sowings, otherwise you may lose your labour and Seed, by those small Birds called Chaffinches, which will pull up and eat your Plants as soon as they peep out of the ground, and all that lieth uncovered of your Seed; the way of prevention is, if you sow on a bed, to cover it with some old Nets, which many use, or else to shoot, or by other means to get some of the aforesaid Birds and scatter the ground with their Feathers, the which I have found very effectual so long as the Feathers kept any thing fresh; thus you are to do until your Plants are pretty gale, and then they will not meddle with them: Also you are, when the Butter-flies begin to be busie, to view and overlook your Cabbages, and when you find any of their Spawn (which are divers small yellow specks) you are to rub them with your Thumb, and so prevent their mischief: And this is much easier and less troublesome, than when they are come to maturity, the which must be destroy'd, otherwise they will destroy your labours and your profit together; there is another, and a worse mischief incident to Cabbages happening some Years that are dry, and in some dry grounds, it is a small Fly, which casts her Spawn on Cabbages, and makes them look as it were mouldy, and where they do prevail much, it doth so Venom the Plant, that it even stifles them: It is very tedious to destroy them, but yet taken in time, and diligently followed, they may be mastered. Now for the saving of their Seed, it is after this manner, about *October* or *November*, or after, when Frosts begin to be frequent and of continuance; you are to take up the Cabbage you desire to save for Seed (which should be hard and well grown, and it will be so much forwarder to break out for Seed when Season serves; yet sometimes I have been forc'd to help forward by cutting the Cabbage on the top with a cross cut) and then if you will, you may wrap an old Cloath, piece of Bals-mat, or Straw about the root, and lay it in some Cellar or by-Room, or hang it up until the end of *February*,
or

or beginning of *March*, and then to plant it in some temperate place not too hot and dry. (Some instead of housing, do plant them in some convenient place pretty deep, and then cover them with earth until the Spring, and then uncover the tops of them;) you may plant it up to the setting on of the leaves, and let it rest until it brings forth its Seed. The stems of good Cabbages will bear as good Seed, as of a whole Cabbage, if you preserve them from rotting until the Spring; you must have a care to keep your Cabbage stalks of Seed from breaking with the Wind, by bearing them up with stakes or poles fast tied.

Colliflower-seed is likewise sown at the same Seasons as Cabbages, but for the most part on hot beds (also amongst early Radish, and betimes in the Spring,) the manner is to make a bed of good new dung and litter together, of what length you think fit for the quantity of Seed you desire to sow, about a foot and a half thick may be sufficient, or two foot; if you begin very early, lay it in order, and tread it well, and cover your dung with about a Hand breadth deep of good mould, making provision to keep your mould from crumbling or falling off the edges of your bed; then you are to sow your Seed not over thick, and covering it about an inch deep or less with fine mould, then you are to Arch your bed all over, that you may cover it the better from cold or wet Weather; you must upon all opportunities when the Air is temperate, uncover them, and harden them by degrees, and when your Plants are about two or three inches high, make another bed of less substance than your first, and be of a fit temper, that is, as warm as the bed from whence you are to plant, especially if it be very early, you are to prick them out about three Fingers breadth asunder or less, not forgetting to water them upon all occasions as need requires; you are to shadow your Plants after new planting, in case of sunny Weather, and so let them grow until they have got some convenient strength, and fit to be planted where they may flower; the ground where you are to plant them, ought to be made rich with dung, and then in some handsom order about two foot asunder or little more, you are to set your Plants; cut them from off your bed with mould about every Plant, and so to plant them that the ground may be low about each Plant, after the fashion of a Bole or Basin, the better to hold Water, being poured to them, which they ought to have pretty plentiful in case of dry Weather; seldom and slight watering will cause them to run to flower before they have sufficient strength to bring forth a good or large flower; if you sow for Winter Plants as about *James-rice*, or

a little after, you are to make a bed of an indifferent temper, and when your Plants are about three inches high, you are to provide a new bed in some convenient warm Situated place of a good substance, the better to hold warmth a good while, laying a convenient coat of mould thereon; if your bed be made most of Straw indifferently mixed with dung, that it may rather be of a fine continued warmth than very hot, it will be the better, and then to prick out your Plants about two or three inches asunder, according to the largeness or smallness of growth, and then to Arch your Bed with poles or hoops, and poles tied at length, that you may the better cover your Bed or Beds when extream weather comes as Frosts, Snow, or much Rain: It will not be your best way to cover your Plants except at the first planting, in case of hot Sun-shine Weather, only for two or three days until they have taken new root, and then only in the heat of the day, until extream Weather come in, and then you are carefully to cover them, but yet to take all the opportunities you may to give them Air; for you must know, the more they are covered the tenderer they will be, and so the more apt to miscarry in case of neglect in extream Weather: And thus you may be furnished with Winter Plants, whereby you may save Seed if your kind be good, and be sure to have good forward Colliflowers, if your ground be not wanting in richness and convenient moisture; if when you Plant them at large, you do not cut them off your bed with mould about the root, they will be apt to stant, and then the Garden-fly will be apt to take them, and very much hinder them, without watering and shadowing of them for some time from the Sun, help them forward again.

Hartichoaks are raised or increased chiefly by the slips of Plants, either in *March*, *April*, or sometimes in *May*, according as the Winter or their Husbandry hath favoured them; some do plant in *September*, and with diligent covering in Winter may succeed; but the sure Season is the rising of the Year, the ordering of them is as followeth: The ground whereon you plant your Hartichoaks ought to be very good, or at least made so by trenching or digging in good store of dung, and then if you will you may sow a Crop of Onions, Radish, or a sprinkling of Carrots, and a few of Lettice amongst them the first Year, and having sown your ground, you may range your line, and by it plant your Hartichoak slips about three foot asunder pretty deep, closing the ground to your Plant with your Heel on that side contrary to the Sun, that there may be a low place the better to hold the Water within compass, that so it may soak to the root, and not spread about; and in case the Water be dry when you Plant,

it will be a sure and good way to lay a little Litter or other Straw thin and lightly upon each Plant, to keep off the heat of the Sun until they be rooted, and in so doing, one watering will be better than two or three without it; and be sure that what Crop you sow amongst Hartichoaks, take the first opportunity to Husband it, that it may be drawn off as soon as possible may be, lest you hinder your Hartichoaks: For you may have good Hartichoaks the first Year if your ground be rich, and watering be not wanting in case of dry Weather, and remember that so soon as your Choaks are come to perfection and fit for use, to cut them down close to the ground, leaves and all, and by so doing, your Hartichoaks will gather slips and strength before the Winter, and your Plants the stronger and forwarder in the Spring; also if you have any Crop amongst your Hartichoaks, it will have the more Air and liberty to come to perfection.

Also about the end of *October*, or in *November*, you are to trench up your ground amongst your Hartichoaks, laying it up in ridges, so as every row of Plants or Hartichoak Stocks may stand in the middle of a ridge, for their better preservation in the Winter-season, also laying dung some in every trench, and withall having a care that you do not disturb or prejudice the root of your Hartichoaks at that time of the Year, lest they should not sufficiently recover to withstand the injury of the following Winter; but if this seem to be too much trouble or cost, then you may open the ground a little about every Stock or Root, and lay in some dung round about, and then rite up the mould about it, and take notice that the more light or strawie your dung is, the better it preserves your Stocks from the Frost, although the other affords most vertue and nourishment in the growing time of the Year: or you may do thus; first dig your Hartichoak-plot all over, and cut off all the flagging leaves both on the tops and sides, and then lay a coat of dung all over amongst your Hartichoaks, especially about each Stock, and so let it rest until the Spring, and then in the Month of *March*, if they are any thing well recovered, or in *April*, you are to dig over your Plot, keeping a good open trench before you; and when you come to a Stock, to open the ground pretty deep about it, even so low as you may with your Thumb thrust or force off all the slips from your Stock, excepting two or three of the strongest, except you find them to be too forward for Fruit; in such a case one more weak or backward is better to be left, and then with the back of your Knife to rub or force off all the young Buds or slips, that so all the nourishment of the root

may be employ'd on your Principal bearers, and then cut of the flaging Leaves, and put in the Mold, closing it well to your Plants or Stock, and so continue your digging and slipping untill you have finished; and in case any be dead or not thriving amongst your Stock, then you may set a young Plant in its place, and if it so happen, as sometimes it doth, that by reason of a very hard or sharp Winter your Hartichoak stocks are so weak, that there is no meddling with them as to slipping, then you may begin betimes, and Sow a crop of either Parsnips, Carrots, or of Salleting, and when occasion requires, give your crop as speedy Husbandry and good distance as you may conveniently, and when your Hartichoaks begin to thrive, they may have all the advantage that may be, and then with a thin slice or something near to that shape, pretty narrow, without digging; force or cut off all the under-slips, maintaining only two or three of the strongest to bear fruit, and when your fruit is ready, take the first opportunity to cut it, together with the leaves close to the ground, that so your Stock as well as your Crop may get advantage; also that your Head-fruit may be the fairer, you are when they begin to fruit, to look diligently between the leaves that grow on the stem, and where you find any young buds for fruit, besides the Head or Principal fruit, you are to force it off, except you are minded to spare any of the more latter buds as a supply after the first is gone: And these directions are sufficient for the Ordering of Hartichoaks, although something more might be said of them.

Sparagus, the Husbandry thereof is as followeth; first provide your self of some good Seed, what quantity you think fit, and then accordingly prepare a Bed being made very good or Rich, whereon you may sow your Seed, covering it either by raking or spitting it in with your spade, you may sow it about *Michaelmas* time, as soon as it is ripe, first breaking and washing the Seed from the husks, which will swim and may be drained from your Seed, then dry it and sow it, but not too thick that your Plants may be the larger, and of a fit size to plant after one years growth, or you may sow it in *February* or *March*, but the earlier the better, for it will lie a pretty while before it spring up; if you sow it at the rising of the year, you may sow it among a Crop of Onions or early Radish, but be sure to give convenient distance to your Crop, keeping it likewise clean from weeds, that your Plants be not starved or smothered, drawing your Radish or Lettice from them as soon as they are fit for use, and then the next Spring after the sowing, you may take it up and Plant it where you would have it grow to perfection, having

having first made your ground very good by trenching store of good dung, the which, if it be well husbanded by making a good bottom for it to grow on, it will last very good for many years, and will afford you very good Sparagus the third year at farthest from the sowing; or if you are not willing to lose a year by sowing Seed, then you may provide your self of Plants of some Gardeners, but let them not exceed two years growth, or three at most; let the Situation be temperate, neither too dry, nor over moist and cold, for then your Sparagus will be late before it Spring; it springs fastest or quickest in hot Sun-shine weather: be careful in the Husbandry of your ground, that you carefully cleanse it from all offensive weeds, as Twich, Nettles, Dandelion or any other, especially that like the former are not usually destroyed by ordinary weeding, otherwise they will be a perpetual trouble to you, besides the robbing of your Sparagus of much of their nourishment; also know, that a Pole of ground is the least quantity you can Plant to have it worth your labour; indeed it is too little, for if you have not so much as to afford you an indifferent Mess at a cutting, thou must be at the trouble to keep them in a cool place till more be ready to cut; also you must be careful to keep it continually clean from weeds; also in the cutting of your Sparagus, be careful that you cut not any but what is fit to cut, and avoid cutting within the ground, lest in cutting one, you spoil two or three, which is soon done.

Having made ready your ground by good trenching, tread out your Beds about three foot wide, and a foot and a half path between each bed, and then plant three rows of Plants on a bed, every Plant as much in length as in breadth, which will be near a foot asunder; if you Plant nearer, you cannot expect to have your Sparagus so fair, but rather a hindering or starving of each other; if you will draw off a quantity of mold off each Bed, and then lay and spread each Plant in order, and then cover your Plants with the mold you take off, or instead of so doing, you may bring a quantity of good mold and cover your Plant about two inches thick; or you may with your Hand or a Trowel open the ground, and raising the middle of the hole a little, spread your plant, which you may easily and readily do if your plants be small, but otherwise the other ways are better and more orderly: Having planted your beds, you may if you will, sow a small sprinkling of Onions or other Salleting for the first Year, or you may give your beds a small coat of Dung as soon as you have planted it, or you may forbear dunging until *Michaelmas* or thereabout; as for the time of planting, I do most approve of the Spring, from the middle
or

or end of *February*, to the end of *April* at farthest, although there be some will plant at the latter Spring, even till Winter, but I have oft seen that their labours have not been answered with that success that they hoped for, although sometimes they might succeed. And to the end that you may have your Sparragus fair and good, you are every Year towards Winter to cut down the stalks close to the ground, and lay a small coat of dung thereon, the which you may take off again in *March* following, if you find the tops of your Plants are sufficiently covered with mould, otherwise it is best to rake it smooth, and so let it rest; Your care must be not to cut the stalks off too early, lest if the Weather prove warm, it should send forth new shoots and weaken your roots, so as to be disappointed in the Spring, when Sparragus is most acceptable and useful; some who have their Sparragus grow on cold grounds, and have such kinds of dung, do bestow Hen and Pigeon dung on their beds: Take notice, that rotten dung is best for the purpose, which if your Sparragus were a very tender thing, then your light straw dung were of greatest respect; also it would prove worth your labour if your ground be apt to bind, or subject to such Weeds as you cannot easily weed out in an ordinary way, once in a Year or two to take the advantage when the ground is frozen about an inch or two deep, with a strong three-tin'd Fork or a Mattock, being carefully used to break up the ground all over your Sparragus-beds, and so let it lie until it be well mellowed; and then when it is thaw'd, you may pick it clean from Weeds, and level it again; and if you think fit, bestow a coat of dung upon your beds, by which means one dunging may prove worth two; you may sometimes see in *London*, Sparragus much earlier than its natural Season, which hath given occasion of wonder to many; the means whereby it is brought to pass is thus, some having some old beds of Sparragus which they are minded to destroy, and having convenience of new or warm dung, possibly intended for other uses afterward, they spread it some considerable compass, and spread or lay their old Plants in order upon their dung, slightly converging them, and so the heat doth force forward a farewell Crop, but how good I cannot say, but undoubtedly it is welcome to such as love Rarities.

I might say much more concerning divers Experiments as to the planting of Sparagus, but in regard my necessary and sure Rules swell too fast, I shall forbear unnecessary niceties, which tend more to trouble than profit.

Sives are encreased by parting the roots, whereby they yield great encrease; they are set in the Spring or Summer, about two or three together

together is sufficient, about a Hand breadth asunder or more, make your ground good, and they will be large if they do not grow too thick; also a little dung or new moulding will make them both earlier and fairer of growth.

Shelot is set in a manner as Sives or Garlick, by parting the roots, and is to be taken up when it hath done growing, which you may easily know by the falling and withering of the blade, and is kept all the Winter for use by those that love it, either to rub their Dishes wherein they lay their Meat, or shred and put into Vinegar; it hath both the smell and tast of Garlick, although in a weaker manner, and is said not to offend by the smell; it is set in the Spring, if it be not taken up, some hard Winters will kill it.

Garlick is encreased by parting the root or cloves, and set sometimes in the Spring, either on the edges of convenient beds, or on beds together; some set in about the time Men use to sow Wheat, but the Spring Season is sufficient; some use to tie it near the time it hath its full growth, about *Midsummer* or little after, about which time it begins to run to Seed, the tying is only to hinder its feeding; so soon as it hath done growing, it is to be taken up and kept dry for use.

Scallions are said to be a different thing from Onions, somewhat resembling Shelot or Sives, but ordinarily amongst most Gardeners, small or spired; Onions being set in the Winter, or remaining all the Year in the ground, and drawn in the Spring for use, are called Scallions; the best time to set them, is a little before, or in Winter; those set in the Spring are ready to run for Seed before they have lost their old head or root.

Michaelmas-Onions, as they are called, are sown between *James-side* and *Bartholomew-side*; if you will you may sow a few Cabbage-feed, or a little Spinage or Corn-sallet amongst them; they are chiefly used in the Spring for Sallets, or to eat with soft Cheese. I have sometimes sown them after *Bartholomew-side*, and in case the ensuing Winter hath favoured them, I have had as good Onions to dry for next Winter, as any I have sown in the following Spring, but if sown a little too early, they have run up for Seed.

Carraway and Coriander, are sown either in the Spring, or about *James-side*, or a little sooner, better sown a little too thin than too thick; the Plant of the Coriander hath a very loathsome smell, they are plentiful in bearing Seed.

Aniseed are sown sometimes with us, and hath some Years brought forth good ripe Seed, the Spring is its Season:

Mustard.

Mustard-seed after it is once sown in a ground, and come to perfection, requires but little care more for future Crops, then new stirring of the Ground, sow it betimes in the Spring.

Liquorish is encreased by Plants or runners from them, one good runner will serve to make divers sets, allowing two or three Buds to a Set or Plant; the ground ought to be rather light than heavy, dry, and not wet, if you would have very good; the ground ought to be well in heart, and very well trencht, that it may run freely according to its nature; they that plant but a little for private use, make beds of three foot wide, setting three or four rows on a bed about nine inches asunder, either more or less; the Plants or sets are set two or three inches in the ground above their tops; if you will, and the ground be good, you may have a Crop of Onions amongst your Liquorish the first Year, if not too thick; some that have but little, do cut down the withered stalks, and spread a little dung all over their beds in Winter; if ground be good, it will bring good Liquorish at two Years growth; let the Sap be well hardened before you take it up, otherwise it will shrink and not be so good to keep.

Strawberries are encreased by setting of the young roots, which encrease from the strings that run from the elder-plants; they are to be had in Woods, and such-like places, from whence divers furnish themselves as well as in Gardens; they are planted at divers Seasons, but chiefly at the Spring and Fall; but many refuse to set them in the Spring, because then there is a Summer Husbandry for weeding, and little or no Fruit the first Year; and therefore it is that most plant about *Bartholomew* or *Michaelmas*, and sometimes later, but something sooner is better, for then they will have gotten pretty strength, and will bear both more and fairer Fruit: Set them about half a foot asunder, and that is high enough; also if you would have fair Fruit, and your bed last good the longer without renewing or new planting, you must often cut away the strings that run from the roots, otherwise they will starve one another; also it will be good to new mould them a little every Winter, not Summer; and in case of dry Weather it will be worth your labour often to water them, chiefly in blooming and fruiting time, but do it thoroughly: Where good Husbandry is not used, a bed will not last good above 2 or 3 Years at most: As for the great kinds of Strawberries, their Husbandry differs but little, only to be set and kept at a bigger distance, and the root kept moulded up, and the stalks for Fruit tied up, and to be kept moist in dry Weather, not forgetting to cut their strings often.

Of Muskmellons, and their Ordering.

IN the Husbandry or raising this Sort of Fruit, there is such diversity of Judgments and Practises that it even wearies me to think of setting down all that might be said concerning them: But I shall only set down some sure and necessary Rules, by the diligent Observation whereof, any industrious Practitioner may attain his End, and by his diligent Observation in his Practice, may attain to a more clear and exact Judgment, than I am able to set down in Writing.

In the first place you are to endeavour to be furnished with such sorts of Seed as are of best Account for Earliness and good Taste, either at the Hand of Friend, Gardner, or Seedman.

In the next place to make choice of such a Situation as may have most advantage of the Sun, and least prejudice from hurtful or sharp Winds, but this may be effected by a convenient Fence made either of Reeds, Broom, or Rye-straw, being made strong with good Stakes and Poles, and well tied with Oslers; let it be made six or seven Foot high at least, and then begin as followeth: Take of the newest Horse-Dung and Litter together, and make a Bed about two Foot and a half high, and as much in breadth, or thereabout, either more or less, treading it hard, and beating it even and handsome both Top and Sides, the better to keep in the Heat; then make provision either with Boards of about half a Foot wide, or thereabout, nailed together a little narrower and shorter than your Bed, for your Bed will shrink something, or instead of Boards some use Thumb-bands of Hay or Straw, the Boards are less troublesome; then lay about the quantity of half a Foot thick of very good sifted Mould, either more or less, according to the Substance and Goodness of your Bed; some lay their Dung two or three Days on a heap before they make their Bed with it; also some mix their Dung with Sea coal-Ashes, undoubtedly it doth cause it to have the greater Heat, and it may be to hold it longer: Having laid your Mould smooth, and settled it with your Spade, then take your Glasses, and make several Impressions according to the quantity of Seed you would prick on your Bed, and within the Circle of each Glass prick some Seed, as much as is convenient, and then set your Glasses over the Seed you prick; then with some Poles or Hoops arch your Bed over, tying some Poles at length, that it

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may

may be the stronger to uphold your covering, and then cover your Bed either with old Sail-cloth or Bass-mats, and Straw upon that, the better to keep either Snow or Rain from your Bed, which would spoil all, either causing your Bed to burn or scald your Plants by chilling or destroying them; some do not prick their Seed, until the second or third Day after their Bed was made, and as occasion serves you may give your Plants breath by raising your Glasses a little, but if your Bed be but slow and of small Heat, you may quicken it by laying some Straw upon and between your Glasses, which you may withdraw as you see Cause, and then when your Plants are pretty strong and green, take off your Glasses, and pull up your Plants and new prick them again in the same Bed and Earth, not stirring the Earth at all; set them up to the Leaves about three Inches asunder or little less, then water them as you see cause with a little Water Blood-warm, then set over your Glasses close, and cover them with Straw all over, and betwixt them cover your Arch with your Mats or other provision for two Days or more, as you see cause; then draw up one of your Plants, and if it have taken new Root, take off the covering and give them the Sun a little in the Morning, and a little after Noon through the Glasses only; and then if Weather permit, give them a little more Sun than they had the Day before; and when you find they will endure the Sun through the Glasses, if Weather give leave, under-set your Glasses a little, and give them Air, and it will strengthen them, and keep them from running up; but be sure to keep them from Wind, put Straw between the Glasses, and let the Sun shine on the Tops of the Glasses, and as they grow in Strength give them more Sun, and then when they have two or three Joynts, provide Banks or Ridges to plant them out; and if need require to water them, do it with Water blood-warm, and every Day take up the Glasses and wipe off the Dew, for it chilleth them.

Some Mellon-Masters, when their Plants begin to Joynt, do pinch or nip the top Bud, that they may cause their Plants to put out for runners before they plant out; as also afterward as occasion requires. Now for the making of the Banks or Ridges to plant your Mellon on, do as followeth: First, make a Trench of four or five Foot wide, then take some mouldy Hay, or the bottom of a Rick, and some Barley-straw, mix them together, and lay them a Foot deep in your Trench, and tread it very hard; then throw Water all over it, then tread it hard again; then lay
a second

a second laying as before, and serve it so likewise; then a third laying somewhat round on the Top, and tread it hard, and make it rise with a Ridge; and let all your Straw be as wet as Men use it for Thatching (some use all Barley-straw, and others use Barley-straw and Dung mixed together, and others only new Stable-Dung and Ashes, &c. any of them may do, only remember if your Straw exceed your Dung, you must moisten it) then take your Line, and make another Trench of the former bigness, and throw the Earth thereof upon your Bank of Straw one Spit deep, and shovel up the Crumbs on the Ridge where the Plants must be set, then take your Straw or Dung, and do as you did with the first, but so as the Straw or Dung of each Trench may joyn together all along, that it may heat alike in every place, then take a sharp Stick about three Foot long, and thrust it into your Bank, about the middle, and let it abide until such time as you think it begins to heat, then pull up your Watch-stick, feel if it be warm in the middle of the Stick; if it be, you may be sure your Bank works well; then begin and make your Holes where you are to plant, on the sunny side of your Ridge near the top about two Foot and a half asunder, every Hole within an Inch of the Straw or Dung of your Ridge, then cut out each Hole of Plants from your Bed even with the top of the Dung with nothing but Earth about them, (there are Instruments to be sold in *Crooked-Lane*, and elsewhere, made of let purpose to remove Mellons, or other choice and tender Plants, which they will do very handsomely without shaking the Mould from the Roots; I think they are called Groves; they are made of double Tin, &c.) set your Plants in the Holes you made, and close the warm Mould of your Bank to them, then put to every Hole of Plants about half a Pint of blood-warm Water, then clap the Glass on close over your Plants, and draw the Earth about the Edges of your Glasses, and cover them with your Mats to keep them from the Sun two or three Days, until your Plants have drawn new Root, then take away the Earth from about the Edges of your Glasses, and lay some mouldy Hay or Straw about your Glasses, and take off your Mats all the Day, from about nine of the Clock, until Sun-set; but you must keep a little Hay or Straw upon your Glasses for the Sun to glimmer through, for your Plants will be apt to fall their Leaves, if the Sun lie too hot upon them, until they have got some Strength, and be entered to it by Degrees, raising your Glasses on the contrary side

to the Wind, so as the Wind come not at them until they will endure the Air without Glasses; and then when your Plants have put out their Runners on each side, some half a Foot, or rather less; then take off the crown or running end of your Plant, and cut it off about the second Joynt, or first, next to the end, and that will make your Runners grow strong. Note, That some Prune before they Plant out, and some pinch or nip the main running Bud when the Plants are but two or three Joynts of growth beginning to run; also when their Fruit is set and likely to hold, that so the Fruit may have all the principal Nourishment from the Root, a little diligent Observation will inform your Judgment much better than I am able to express by my writing; and when your Runners begin to come out of your Glasses, you are to defend them as you see cause with a little Straw lightly laid upon them, until you have entred them to endure the Weather; and having hardened them, as I said, by little and little, you may take off your Glasses, and give them Sun from nine or ten in the Morning, until seven at Night, and then Glass them again, and cover them with your Mats, and keep in the heat of the Sun; and when you see your Fruit begin to knit, Glass it, but have a care the Glass do not burn it; then put a piece of Tile under your Fruit to keep it from the Earth, not watering, or but very little, as need requires, until your Fruit be as big as a Goose-Egg, except the Weather be extream hot, and your Bank very dry, &c. For watering your Bank, take Pond or Ditch-Water, and give your Bank so much on the sides and allies as will soak quite through to the Straw, but let not much come into your Holes of Plants; remember this watering ought not to be but in very hot and dry Weather; also let your Mats be kept over your Plants every Night, until your Fruit be wrought out, or as you see the Night or Weather inclined, whether friendly or otherwise, as to such tender raised Fruits; for the truth is, if it be mild or temperate, Air is best for them: Take notice, that if your Plants turn up their Ends or Noses toward the Air in a dry time, than they want Water, the which you are to supply them with discretion, avoiding excess: Be careful at first planting to keep your Plants from Rain or Snow-Water, for it will destroy them if it come at them: If your Plants turn the Ends or Noses upward towards the Air, be sure there is a Fault at the Root; but when they thrive best, they will carry their Ends or Noses close to the Ground, and will be very limber, then do not meddle

dle with them at all: Remember every Morning when you heave your Glasses, to wipe the Dew off them, also gently shake it off your Plants with your Hand, for it weakens them.

Also at first giving Air to your Plants, raise the Edge of your Glasses with a little Straw to stand on; and as they grow more hardy, you may raise them with something else, by giving them Air with discretion, your Plants will dry and gather Strength and grow hardy; if your Bed be too cold, cover it well amongst your Glasses with Hay or Straw, and you may be sure your Plants will not burn at the Roots; if your Bed be too hot, you may know by the blackness of the Leaves of your Plants, pull up one, and you shall see it burnt; then cover more slightly, and in the heat of the Day shadow them with your Mats, and take away all the Straw from amongst your Glasses, if there be any, and new mould them up to the first Joyn, and they will draw new Root; also remember when your Plants have taken new Root after their planting, give them as much Air on the contrary side to the Wind, as you may with discretion, from nine or ten till three Afternoon; much heat and close covering causeth them to run up; water them but once after planting, until they are prettily knit, unless great need require.

It is usual with many to steep their Seed before they sow or prick it on their Beds, which is a good way if you do not sow it before your Bed is come to its heat; for by steeping, your Seed is so prepared that it comes up goale and handsome, and not so small as that which is forc'd without steeping; some use Milk, and some use other Liquors, but Water is as effectual as any, and more natural.

Some that raise many Plants, do make a little Bed on purpose to sow their Seed on, and then prepare Beds to prick out their Plants upon; also divers, instead of particular Glasses for their Bed, do use a Frame of Glass, as it were divers Panes, so handsomely fitted, that they may take up all or some, as occasion requires, without any trouble; also a Frame arched over, to set on and take off as occasion serves, for the more easie and convenient opening, and taking off their Glasses, if by any Accident you chance to lose your first Plant, you may prick over the same Bed again; and though the Heat be but little in comparison, you may cause it to strike new Heat by covering both Bed and Glasses with store of Straw or clean Horse-litter; you may be sure to raise good sound Plants on such a Bed; but if you find it too weak,

weak, you must provide another Bed to prick your Plants upon when they are ready: Consider that a fine moderate warmth is far better and more natural than extream Heat: still remember that as you raise your Plants, so you must look to keep and maintain them usually two or three Days after your Bed is come to its Heat; the danger of burning your Plants at the Root will be over, except your Bed having good Strength, chance to take a little moisture by Rain; and some in making their Ridges do leave the space of three or four Foot between each Ridge, and then when the Heat is something declin'd, they trench up those spaces with good Dung for the purpose, thereby adding new Heat to their Ridges, causing their Mellons to come away roundly: Some do water their Ridges or Holes of Plants very little, but only the Allies between, which do not lie very deep.

If the Mould do chance to shake from your Plants in removing, the matter is not great, if your Ridges be of a good temper for Heat, they will quickly get Strength, and sometimes outgo such as were not shaken at all: If your Ridges heat too slowly, you must cover them well with Straw and Mats, and that will cause them to heat; the like Course you must use to keep off Snow or Rain from your Ridges, at the first planting especially: Also it is not the least of that skill that belongs to Mellons, to know how or when to gather a Mellon fit either for present spending, or to spend two or three Days after, in case of sending it far off, and so as it may not be raw or hard in the eating, or too ripe and waterish, but dry and firm; know that much wet or cold Weather about the time that Mellons come to perfection, doth very much lessen their Goodness, causing them to spend more flat and waterish, and therefore if you can use convenient Means to defend them from too much Moisture, your Fruit will spend more pleasant a great deal; diligent Observation and good Practice will make all clear in time to an ingenious Practitioner.

Take notice, that in wet Ground, or such as is apt to hold Moisture overmuch, it is a good way to lay a laying of Bush-Faggots in the bottom of your Trench, the better to cause the Moisture to sink away from your Dung, and which may be taken away when you Trench your Ground again, or as you see Cause.

Of the Ordering of Cucumbers.

IF you desire to have them very early, you must observe the same Method that is set down for the raising of Musk-Mellons, only there is not so much necessity of pruning to cause them to Fruit; but if the top Sprout be nipt when they are shot out three or four Joynts, it will undoubtedly cause them to knit the sooner for Fruit; they are as tender to bring up when they are sown early as Mellons; but if you begin with them any time in *March*, it will be time enough if you have Glasses; and then you shall not need to make Ridges to plant them out at large, but only to make Holes about the bigness of a Bushel or bigger, the which you are to fill up with warm Stable-Dung, settling it close, making a Hole in the midst, in which you are to plant three or four Cucumber Plants with their Mould about them, and then to Earth them up, so as they may stand as it were in a Bole or Pan, the better to hold Water, which they ought to have in good plenty when they begin to Fruit especially: Also if you raise them tenderly and under Glasses, you must use them so at first planting, otherwise a little cold wet will destroy them; but if you cannot afford to Glasse them, you must not plant out until the Weather be very warm and dry, and then at first to shadow them from the Sun, in case the Mould were shaken from the Roots, until they had recovered new Root, but yet giving them Air as much as may be if temperate; only lightly covering them with Straw, or some other convenient things every Night, if like to be cold: Remember at first planting to give them a watering, but if you will not be at the trouble of raising them on a Bed, then you may any time from the beginning or middle of *April*, to the end of the first Week in *May*, make divers Holes which you are to fill up with Dung, or other Soil that is good, and upon that to lay some good Earth, shaping it in fashion of a Bole or Pan, as I said before, and then to prick in about half a Dozen Cucumber-Seeds; and then the Weather being warm, water them now and then as you see cause; and if your Plants take and thrive, three or four will be sufficient in a Hole, you may pluck up the rest and bestow them in other Places.

Plenty of Water in dry Weather, will cause plenty of Fruit in case of much wet or cold Weather; when your Plants are young, it will be the surest way to defend them from it by covering,

ring, otherwise they may either stunt or die; if you desire to save any for Seed, then you are to save some that are pretty forward; the ripper and better grown your Seed is, the longer it will last good, three or four Years at least; the ripper your Seed is, the less labour it will require to wash from the Pulp; but the ripest will require a good many several shiftings of fresh Water to wash it from the slimy stuff that cleaves to it.

Pompions may be raised and planted as Cucumbers, either early or later, but most ordinary People do set them on Dung-Hills, any time from the beginning of *April* to the beginning of *May*; the more they are watered (in case of hot Weather) the more Fruit, and fairer they will have.

Thus I might speak of divers other Plants and their ordering, as Woad, Madder, Saffron-teasels, &c. but in regard my foot swells so fast, I shall forbear, and only speak of the ordering of some sorts of small Herbs, and so conclude this Part, and speak something of the ordering of the Garden of Pleasure.

*Of the Seasons, Order and Manner of Sowing and Setting of
divers Sweet-Herbs.*

MOST sorts of Sallet, Pot, and Sweet-Herbs, excepting some few which I shall speak of afterward, are, and may be sown any time from the beginning or middle of *March*, until *James-tide*, and a little after in most sorts of Ground that are of any indifferent Temper, but your either too early or late sowing of most small Herbs on Grounds that are either wet or cold is apt to miscarry, either by the chilling of the Seed too early in the Spring, or the Winter's Frost coming too suddenly on the latter, before they have taken sufficient root to withstand it, being oft heaved or spewed out of the Ground by Frost, and sometimes by Worms; so that your sure way is, not to be too forward in the Spring, nor too late towards *Autumn* in sowing on such kinds of Ground: Now for such sorts of Herbs that are for Physick-Uses, or to Still, which of most are thought to have greatest virtue in *May*, you are either to sow them between the middle or end of *July* and *Bartholomew-tide* at farthest, or betimes in the Spring: but those that are tender are to be sown upon a hot Bed, and afterwards drawn up and set in some thinner order in good Ground, and constantly supply'd with watering, as need requires, by which means afore said, the desired end may be accomplished;

complished : but take notice that those things raised on a hot Bed, are to be covered or defended in case of cold or frosty Nights or Mornings, until they have got some Strength, or are out of Danger by the Temperateness of the Season.

Of the Manner of Sowing Small Seeds.

First you are to bestow some good Dang or Soil on your Ground if need require, and then dig it very well, breaking the Clods, and picking out all offensive Weeds, if need require, laying your Ground very level before you begin to sow your Seed, lest by endeavouring to rake it level after you have sown, you rake your Seeds on Heaps, and then you may tread out your Beds handsome and straight by a Line, it will be the pleasanter to look on ; and then sow your Seeds as even as you can in every part of your Bed alike, but not over thick, lest your Herbs starve one another, besides the waste of your Seeds ; then spittle in your Seed with your Spade about an Inch or two deep or less, so they be covered, and then lightly smooth over your Bed with your Rake ; if your Ground be loose or dry, you may smooth or lightly clap your Bed over with your Spade, or if you will, you may sow your Seed in Rows or Trails, either round about the Edges of your Beds to keep them in Fashion, and plant either Herbs or Flowers on the Body of your Beds, or you may furnish your Bed all over, making three, four, or five Rows or Trails, according to the bigness of your Bed ; the order or manner is to make each Trail of like distance, and range your Line, and by it, either with your Finger, or a small Stick, to make your Trail about an Inch thick or thereabout, and therein to sow your Seed, not over-thick ; if you put your Seeds in a white Paper, you may (if the seeds are small) very easily and equally sow them by shaking the lower end of your Paper with the Fore-Finger of that Hand you sow with ; the Paper must not be much open towards the end ; the way is easie and handsome to sow Trails, either for Knots or otherwise, and then with your Hand or a Trowel to smooth the Earth into each Trail, and by this way you may be sure to cover your Seeds well, &c. Having said thus much as to the Seasons and manner of sowing, which is a sufficient Direction for almost any sort of either Sweet, Pot, or Sallet-Herbs, (especially having spoke so much in particular before) only take notice that those sorts of Herbs or Flowers that are early to be

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sown,

sown, and the same Year seed and die ; as also for those that are very tender, for such sorts you are to take the advantage of the Spring, namely, *March*, *April*, and *May*, as either the hardiness or tenderness of the thing requires, that so you may have the benefit of the Summer's growth and profit seasonably, either before it seed or die.

Sweet-Marjoram is something tender, and therefore if you would have it betimes, you must sow it upon a hot Bed, or in a warm situated Place ; yet I have oft sown in the beginning of *March* with good success, the Ground being good, and not of a wet or cold Nature. Sweet-Basil is more tender and apt to miscarry than Sweet-Marjoram ; it ought to be sown both in a warm and dry Season ; for if moisture come at the Seed before it hath lain some time in the Earth, it will turn to a Jelly, and never grow ; so likewise if sown on a cold or moist Ground : Some to prevent its miscarriage, mingle their Seed two or three Days before with some fine and well-tempered Mould, and then sow it ; *April* or *May* is time enough : Some that have such Opportunities, do sow both this and the former also, on such Beds whereon they did raise their Muskmellons or Cucumbers.

Rosemary-Seed is likewise very tender being sown, and therefore requires to be sown in a warm Season, &c. As for Thyme, Savory, Hyssop, &c. they are pretty hardy, and may be sown in any of the Seasons before-mentioned, and therefore I shall say no more as to their sowing, but give some few Rules concerning the increasing of some few sorts of Herbs not usually sown of Seed, because they are both easily and quickly brought to perfection by slipping and parting their Roots.

And for this purpose usually the Spring or rising of the Year is the best, as being most temperate and seasonable for all sorts of stringy-rooted Plants, yet notwithstanding, as I said before of the sowing of most sorts of small Herbs, so I say concerning most sorts of setting Herbs, that they may be removed, slipped, or parted, any time from the beginning of *March*, to the end of *August*, and something after ; only you are to take notice, that in extrem hot and dry Weather, you are to forbear removing and setting Herbs, &c. unless you use more than ordinary diligence both for watering and shadowing what you plant.

In the setting of Herbs, &c. either of Slips or parting the Roots to set, observe these few Directions : First, top them a little for handiomeness, and if there be any superfluous Leaves that may unnecessarily

unnecessarily draw away any sap from your Slip before it is rooted, top them or cut them off, yet not so as to rob your Slip of all its Leaves, especially the youngest; also if they have any Roots, top them a little; also do not set too many in a heap or cluster together: Also those that are long, Wall-Flowers or Rosemary, give them a little twist or turn near the lower end to make them tuff, and not to break in the setting: Also those Herbs or Slips that are short, brittle, or sappy, you are to set them with your Finger if the Ground be easie or soft, or with a Trowel, or Holes made with a Stick to set them in as need requires; also whatsoever you set after you have closed the Earth to them, water them throughly, except in case of a soaking Rain; also in case dry Weather happeneth upon your new setting, you are to keep a constant course in watering until the Weather change, or at least till your Herbs are well taken in the Ground. Remember that slight and seldom watering daily, and but slight watering, yea, in a hot and dry time, will do more hurt to young rooted Herbs, than if you did not water at all; therefore I say, that what you water in a dry Season, do it throughly, and pretty constant; do not water those things that are throughly and well grown, in a dry time, except you do it, as I said before, throughly and constantly: Also if you are necessitated to set any Plants that are choice in a dry or hot Season, either set them in the shadow, and after remove them in more convenient Places, or at least shadow them where you would have them to grow, not neglecting watering as need requires: Also take notice, that one good watering of any Herbs, &c. in a close or gloomy Day, is better and more effectual than two in hot Sun-shine Weather, in case the Ground be dry; also for all ordinary or hardy things, the Evening watering is more effectual than the Morning; also be careful to take the first opportunity to weed your Herbs, &c. although in dry Weather, though some do purposely forbear, and say the Weeds keep their Herbs moist, and from the violence of the Sun, but I am sure of the contrary; for if there be any virtue or moisture where they grow, they will have the best share, the Earth being more natural to Weeds, than to what we set or sow, as plainly appears by their quick growing, and overgrowing of what we set or sow: Now for the kind of Water that is best to water your Garden, it is certain that Pond or Ditch-Water is better than Running or River-Water, yet that is far better than Pump or Well-Water, yet it hath always been my

Lot to have no other for my use, whether for Cucumbers or other Herbs and Flowers; yet I doubt not but there is a Week odds in a Month's growth at some times of the Year, between watering with a warm fat standing Water, and watering with cold Pump or Spring-Water, but yet the worst is better than none; but where occasion is for some small quantity, for some tender Plants, some have great Tubs fill'd, wherein they put Sheeps Dung or other Dung, letting it stand in the Sun until it is in better case to use as aforesaid, still supplying their Tubs as need requires; and as I said before, one watering towards the declining of the Day or Evening, is better than two in the Morning or heat of the Day, for most things.

Another thing worth the practising, is, that you be careful to cut or top your Herbs often, for it is not only handsome, but causeth your Herbs to last longer, whereas to suffer Herbs to grow rank, or woody, or to seed quickly, destroys them, or so weakens them, that they do not thrive again in a great while: By your often topping your sweet Herbs, you may, if you will, make use of them to dry and make them into Powder to use all the Winter, so that you need not cut your Herbs in the Winter: Another convenience is, that if you cut your Herbs often, you may cut them at any time without prejudice to them; whereas if you suffer them to grow Woody or to Seed, you hazard the killing of them, in case you cut them in a very hot and dry time, or in the Winter; another thing worth practising is, that once a Year, or once in two Years you bestow new moulding of those sorts of Herbs that continue long without renewing, as Thyme, Savory, Balm, and divers others the like; divers sorts will upon the new moulding take root, and become as young again, your Mould ought to be sifted or very fine, that it may the better fall in amongst the Branches, &c. Lavender ought to be cut even and handsome so soon as you have your crop off, and if it cannot be made smooth and handsome at one cutting, you may cut it a second time before Winter, and then it will be pleasant, and grow strong and handsome without the help of Poles which some use, occasioned through unhandsome or negligent Husbandry. Sage and Rosemary Beds are likewise to be cut smooth and handsome, which being often done, a small matter doth it; and besides they will be useful as an Hedge to lay small Cloaths upon to white or dry, besides a handsome Ornament in a Garden.

Another

Another convenient Practice tending to handsomeness and good order, is, that you sow or set together in one quarter, or Beds by themselves, all such Herbs as are durable, and not to be renewed every Year; by which means that part of your Ground will be always in handsome order: You may easily guess what the contrary practice will be.

After this manner you may bring it to pass, sow Thyme, Winter-Savory, Hyssop, Pot-Marjoram, and Winter-Sweet-Marjoram, which is increased only by Slips; let such be near together; likewise Balm, Coastmary, Mint, and the like, in Beds near together; also Bugloss, Sorrel, Succory, and the like; and for such as are, as I said, to be renewed every Year, as Sweet-Marjoram, Summer-Savory, and Sweet-Basel, &c. let these be near together; also all ordinary Pot-Herbs that are yearly renewed, by themselves; I shall need to say no more as to this.

A Catalogue of divers Ordinary Herbs and Roots, by the View whereof any Gardner may readily call to mind what Sorts of Herbs he is to provide for the Furnishing of his Garden; also briefly by what Means Increased.

The Names of divers Sorts of Herbs, commonly called Sweet-Herbs.

Balm, chiefly increased by slipping or parting the Root, sometimes of Seed.

Basel, only of Seed.

Burnet, both by slipping or parting the Roots, and by Seed.

Coastmary, chiefly by slipping or parting the Roots, sometimes by Seed.

Camomile, by slipping or parting the Roots.

Callamint, both by Seed and Slips.

Hyssop, by Seed, Slips or Tops.

Lavender, chiefly by slipping.

Musked

Musked Crains-Bill, or Muskom̃y, chiefly by Seed shed, &c.

Mints,

Spear,

Red,

Water,

Basel,

Pide,

Marjoram,

Sweet,

Winter-sweet,

Yellow,

Pide,

Pot or Wild,

Maudlin, or Sweet-Maudlin, both by Slips and Seed, two sorts.

Penroyal, chiefly by Slips, and there is three or four Sorts.

Rosemary, chiefly by Slips, but likewise of Seed, but so it is very tender.

Sage, chiefly by Slips.

Savory, the Winter, both of Seed and Slips; the Summer, only of Seed.

Thyme,

English or hard Thyme,

French,

Pide,

Limon,

Musk,

Mastick,

Herb Mastick, chiefly by slipping.

Tansie, both by Seeds, Slips, or parting.

The Names of divers ordinary Physick Herbs, usually planted in Gardens.

Angelica increased only by Seed, sow it in Ground not too dry, or as soon as it is ripe.

Asarabacka, only by parting the Roots.

Bears-Foot only of Seed, I mean, the ordinary Garden kind call'd Setter-wort.

Carduus, only of Seed.

Dragons, chiefly by off-sets or young Roots, sometimes by Seed.
Dittander,

Dittander, by Sprouts from the Root.

Elecampane, of Seed and parting, the upper part of the Root.

Fetherfew, of Seed or Slips.

Goats-Rue or Seed, or Slip near the Root.

Germander, chiefly of Tops or Slips.

Garlick, by parting the Root.

Harts-Tongue, by parting the Root; it doth likewise make increase by Seed, but, &c.

Horfe-Radish, by either Tops, or Pieces of the Roots set.

Liverwort, is brought sometimes from Places where it naturally grows, &c. set in some shady place.

Lavender-Cotton, of Slips.

Liquorish, of Plants or Runners.

Master-wort, of Seed or Runners.

Marsh-mallows, of Seed, or of the top Sprouts from the Root, set in moist or shadow.

Mother-wort, of Seed, or parting the Root.

Pelletary of the Wall, of Seed or Slips.

Pionies, single of Seed, or pieces of Roots, chiefly near the tops of them.

Rubarb, three sorts both of Seed and tops of the Roots parted.

Rue, chiefly of Slips.

Solomon's-Seal, sometimes by Seed, but most commonly by the Tops or pieces of the Root.

Scordium, of Slips, not in too dry a Situation, it should be moulded over in Winter.

Scorsoneria, of Seed, Slips or Root.

Scurvy-grass, chiefly of Seed, &c.

Southern-wood, of Slips.

Smallage, of Seed or Slips.

Sneese-wort, of Slips fast enough.

Tansie of Slips or Seed.

Greek Valerian, of Slips or Seed.

Great Valerian or Setwell, chiefly Slips from the Roots.

Winter-Cherries, increase fast enough from the Root by Sprouts and Runners.

Wormwood, both English and Roman, both by Slips and Seed.

There is a sort of Sallet commonly gathered in the Spring, consisting of divers young buds and sprouts, both of Trees and Herbs, the

the which being gathered discreetly, with nothing but what is very young and tender, and so that no one thing do too much exceed another, but that there be a fine agreement in their relish; if so, it will be very acceptable to many.

Violets with some young leaves,
Primroses and some young leaves,
small sprouts of Burnet, also of
Mints.
Surrel, and divers other of the
like, also small Buds of Goosberries,
Roses, Barberries, &c.

Also when they are to
be had, the Flowers of
Borage, Bugloss, Cowpa-
gles, Archangel, with di-
vers other.

*The Names of divers ordinary Pot-Herbs, call'd also
Chopping-Herbs.*

A Rach, red and white, of feed.	Marygolds, of feed.
Blood-wort, of feed.	Nep, of feed.
Borage, of feed.	Orach, of feed.
Bugloss, of feed.	Parsley, of feed.
Beets, of feed.	Sives, parting the Roots.
Carrots, of feed.	Strawberries, of young roots from the strings.
Clary, of feed.	Succory, of feed.
Endive, of feed.	Violets of slips and feed.
Langdebeff, of feed.	Worts or Brockets, chiefly of feed.
Leeks, of feed best.	

*The Names of divers Sallet-Herbs and Roots, and other Herbage
for the Kitchen Uses.*

A Llifanders, of feed.	Cucumbers, of feed.
Beans, French, and ordi- nary Garden-Beans.	Cress of the Garden, of feed.
Beets, both red and white of feed.	Dill, of feed.
Cabbages, of feed.	Endive white, of feed.
Carraway, of feed.	Fennel, of feed.
Carrots, of feed.	Hartichoacks, of slips.
Corn-sallet, of feed.	Lettice, of feed.
Colworts, of feed.	Muskmillions, of feed.
Colliflowers, of feed.	Mustard-seed, of feed.
	Onions, of feed.
	Parsley, of feed.

Parsnip,

Parſnip, of ſeed.	ces of root.
Potatoes of <i>Virginea</i> , and <i>Canada</i> or <i>Jeruſalem</i> Hartichoaks, increaſed by ſmall off-ſets, and quartering their roots.	Shelot, by parting their roots.
Purſlain, of ſeed.	Scorſonera, by ſeed, ſlip, or root.
Rocket, of ſeed.	Skerrets, by ſlip or ſeed.
Rampions, of ſeed.	Sparagus, of ſeed.
Ramſons, by parting their roots.	Sorrel, French and Engliſh, the ſorrel moſt by ſlipping, and the other moſt by ſeed.
Raddiſh, of ſeed.	Spinage, by ſeed.
Horſe raddiſh, by tops or pie-	Tarragon, by tops and ſprouts.
	Turnips, by ſeed.

There are divers ſorts of Peaſe, of which I will name ſome few.

H ot-ſpurs-peaſe.	Grey Windſor-peaſe.
Redding-peaſe.	Great Maple-peaſe.
Sandwich-peaſe.	Great Bowlins-peaſe.
Sugar-peaſe, white and grey.	Great Blew-peaſe.
Tuſted or Roſe-peaſe, two ſorts.	

Theſe things following, are by divers Cooks, and others, pickled for Sallets to uſe in the Winter.

C ucumbers.	Broom Buds.	} Alſo ſome pickle up Turnips, Beet-roots, and divers other things, which being artiſicially done, are very acceptable.
Purſlain.	Elder-buds.	
Tarragon.	Onions.	
Summmer-favory.	Leeks.	
	Hartichoaks.	table.

Alſo ſome make a very acceptable boil'd Sallet of the young and tender Stalks of both Turnips, and of Cabbages, when they firſt run up in the Spring; they boil them, and peel them, and put Butter, Vinegar, and Pepper to them.

Theſe are put with White-Wine Vinegar and Sugar, for Winter Sallets.

C Love-gelly-flowers.	Burage-flowers.
Cowſlip flowers.	Archangel-flowers.
Bugloſs-flowers.	

Of the ordering of the Garden of Pleasure, with the manner of increasing and ordering divers sorts of Flowers, for the furnishing of Gardens, with divers Forms of Knots and Plots for the purpose.

IN the first place, you are, if you may conveniently, to erect it in such a Place where it may yield most Delight, in regard of its Prospect from your House, or some chief Rooms thereof; and withal, if it may be pretty well defended from the injury of the sharpest Winds; and in so doing, you may have in a manner a perpetual Spring, something or other continually in its Beauty, either Flowers, or ever Greens, except in extream Frost and Snow, but even then there are many housed Greens do shew forth their Beauties, but let every one do as their Means, Minds, or Conveniences will permit.

The Plot of Ground being resolv'd upon, you are to fence it in according as you desire, or can; only remember, that if there need either bringing in, or carrying out of Mould, &c. that you do it whilst you have the opportunity of a Cart-Way, which is usually cheaper and speedier than Wheel-barrows, and then you may level it, and cast it into what Form you think fit, or as the bigness of your Ground will handsomely bear.

I have, for the Ease and Delight of those that do affect such things, presented to view divers Forms or Plots for Gardens, amongst which it is possible you may find some that may near the matter fit most ordinary Grounds, either great or small; and shall leave the ingenious Practitioner to the Consideration and Use of that he most affects.

The Names of several Herbs, &c. fit to set Knots with, or to edge Borders to keep them in Fashion, &c.

Dutch or French Box, it is the handsomest, the most durable, and cheapest to keep.

Hyssop is handsome, if cut once in a Fortnight or three Weeks in the growing Season.

There is two or three sorts of Thyme will be handsome and durable, if oft cut.

Germander was much used many Years ago, it must have good keeping.

Thrift

Thrift is well lik'd of by some, it is apt to gape and be unhandsome.

Some use Gilded-Marjoram, or Pot-Majoram with good keeping will be handsome.

Also besides the fore-named, you may edge Borders with divers things; as Pinks, they will be very handsome by cutting twice a Year.

Violets double or single, they will thicken and be handsome if oft cut.

Grass cut oft.

Perwinkle cut oft.

Some use Lavender-Cotton, and Herba-grace, &c. will be handsome if kept well.

Rosemary may be kept low as other Herbs, if oft cut.

Lavender, as it may be kept, will be both low and handsome Sage likewise.

Primroses and double Daisies are set for that purpose likewise, but they ought to be planted something shady.

Another thing I thought good to mention: It is common in the Mouths of many, that Box doth take away all the heart of a Ground where it grows; but the naked Truth is, that it doth not draw so much virtue from a Ground as other Herbs doth; my Reason is, Because it doth not grow so fast, and so by Consequence not draw so much virtue from the Place where it grows; and in case it do begger or barren a Place where it grows, it comes to pass by its long standing compleat and handsome, which is a part of its Excellency; it being the most durable of any kind of Herb wherewith Knots are made; but to prevent, or rather amend the Inconveniences that seem to follow by the running of its Roots into your Knot, which any other Herb doth more, by how much other Herbs do grow more than Box; the remedy is, with a Knife or piece of an old Sithe once in two Years to cut the Root down close to the Box on the inside of your Knot, and then, if need be, to new flourish your Work with a little fresh Mould; also take notice, that often cutting of either Box or any other Herb, is a means to prevent the much running of the Roots into your Knot, the same reason is for Hedges or Borders.

So having given you as it were a taste of what I could have multiplied very much, if I had thought it necessary, I proceed; and as for the making of any of these on the Ground, I shall say nothing, but only that you would be careful so to fit your

Work to your Ground, that it may lie pleasant and suitable, not too thick, but so as there may be convenient room to pass to every part of your Work; also convenient room for what you shall plant, that it may not smother or hide any part of your Work that might yield Delight, neither that you make your Work so spacious, but that you may have it pleasantly in your Eye at a View: Let not your Walks be too little, neither too big, like a small City with over-large Gates. And now I will proceed to some easie and plain Directions, very useful for a Learner, how to level and bring a Garden into some Order and Form. In the first place, you are to provide, so as to make your Borders good either with Dung or good Earth, or both, that so your Trees or Flowers, or both, may thrive the better, and your Fruit be the fairer; but as for that part of your Ground where your Walks are to be, it matters not how Barren, Chalky, Gravelly or Stony they be, so that you be careful to pick out all sorts of Weeds that are not easily cleansed or destroyed by ordinary Hand weeding, as Twich, Nettle, Dandelion, &c. otherwise they may prove a perpetual Trouble to you, beside the charge of often weeding; so likewise if you make Grass-Plots, it matters not how barren or poor the Ground is, so it be not either very stony or barren Gravel, which usually starves any thing that grows on it, if the Weather be but a little dry; but usually Grass grows faster in Gardens, than most Gardners would have it; but if you intend your Plots for Flowers or Herbs, let your Ground be good and well cleansed; but if for Flowers chiefly, then a supply of Earth from your Kitchen-Garden is best, and supply your Kitchen-Garden with Dung, your Herbage will be the better.

Now for the manner of going about to put your Garden into Form, it is as followeth. First you are to provide a quantity of handsome straight Stakes, about four or five Foot long, being sharpened at one end, and then about two Foot and a half from the Wall or Fence, where the Border is to be made, range a Line, and then by your Line pitch down a couple of Stakes, of such a length as your Level will well reach to level the tops of them exactly; let them stand fast in the Ground, and then in the same straight Range drive down another Stake about a Pole or two from your first, the which by your Eye you may level with your first Stakes, having one, whilst you eye your Stakes, either to raise or drive your Stakes lower as you shall appoint, until it be exact, and then you may proceed as before, as occasion requires, until

until you have staked out all your Borders by your Wall, or outside Fence; and then you are to proceed to the other part of your Ground, first measuring the breadth you intend for your Walk round your Plot, or utmost Walk, and then at some special corner of your intended next Border or Quarter: Having ranged your Line the length of your Ground, and cast out your Walk, pitch down a Stake exactly at the corner of your quarter, and level it with one of your first Stakes, and then a second in the same straight Line, of the same height or level with the first, and so proceed the whole length, pitching in a Stake at every special corner of your Work, which will be a standing Rule to you, not only for the level of your Ground, but also for the exact carrying off your Quarters square or equal; and having levelled as many Stakes as you think is sufficient for every part of your Ground, go to your first Stake, and consider what height you are to carry your Ground at, either as it will maintain of itself, or as the Conveniences you have to that purpose will bear, being careful that you do not raise your Ground so as to obstruct your Doorways or comings in, &c. and having considered your height, make a Notch on your Stake quite round at the height you intend to carry your Level, and then with a Stick or Rule measure from the top of your Stake, to the Notch or Mark you made; and according to that Measure go and notch or mark all your Stakes, or as many as you think fit from the top downward, and where the Mark falls to be, is the level or height you propounded; so that after you have marked your Stakes, if you think upon due Consideration that you have resolved either too high or too low, you may accordingly propound another height, and being resolved, it is but fastening a Line about the Notch of one Stake, and fastening it tite about the Notch of another, and by it, if you cannot do without it, you may carry on your Work level; but in case you would not have your Ground of a plain level, to the end that any fall of Water may not settle, or be apt to stand, to the annoyance of your Garden, or that the Nature of your Plot be such as you cannot make a flat level with Convenience, then you may on the same Stakes so pitched and levelled as before, allow what Fall you think fit for your turn, that if you allow a Foot, more or less at the utmost end or side of your Ground, then half so much in the middle, &c. considering, that if your Ground be of any large extent, you must allow a greater Fall for the purpose aforesaid; yet considering that too great

great a Fall may be as prejudicial as too little, &c. Or if this way seem too troublesome, then you may take a couple of Stakes, and according to your former Order by a Line, pitch in one at the hither end, and another at the farthest end of your Ground, and let them be both of a suitable height above the Ground or level you propound at each particular end; and then between those two first Stakes pitch in a third, levelling it with the two former by your Eye, and so as many as you see convenient in order as aforesaid. and then measuring from the top of your first Stake to the height you intend after the manner aforesaid; by which means you may carry a true Falling or Hanging level more or less, as occasion requires, either raising or abating, as need requires; and although you carry the length of your Ground upon a falling level, yet you may carry every particular range of Stakes overthwart or cross your Ground on a plum or flat level, after your first hanging range is pitched; by which particular Stakes you are to level your overthwart Ranges, yet so as handsomely to suite and answer the natural fall or level propounded.

By this way of levelling you may easily find how or which way to bring or carry any Water-course from place to place.

In the next Place you are to proceed to the digging and orderly finishing of your Ground, beginning first with your Borders, exactly breaking the Clods, if occasion requires; also carefully picking out all such Weeds as will not be kill'd in the burying, laying your Ground level and orderly; and having digged your Borders, to rake them exactly according to the level of your Ground, and then range your Line, allowing what breadth you think fit or convenient, withal allowing a matter of two Inches, or thereabout, of Mould on the outside of your Line to tread or beat in just even by your Line, to the end your Borders may lie fast and handsome, and not be too apt to moulder down; and then to set the Edges of your Borders close and handsome on the inside of your Line, either with Pinks, Violets, or any other thing you think fit, that keeps always green; and having set your Range quite through, close the Mould to your Herbs first on the inside of your Border, with the edge of a Tile, or the like, making as it were a little Gutter, in which you are to pour your Water when you water your Herbs, which ought always to be as soon as you have done setting, except in a very wet time, and then, if not before, to clap the side of your Border with the back of your spade; but if you desire to edge your Borders with Turf, be sure

sure it be not a twichy kind of Turf, for that will be a continual plague to your Walks and Borders; or you may sow the edges of your Borders with Pink-Seed, first making a Trail or Gutter straight and even on the inside of your Line, and therein sow your Seed as equal as you can, covering it with the same, or other fine Mould.

After you have finished your utmost Borders, you are to proceed to the finishing of your other Borders and Quarters with the like Diligence aforesaid; as to their levelling, breaking of Clods, and picking out of such Weeds as may prove offensive; and if you intend your Quarters for Knots or Grass, you are to rake your Ground as you go, that is, when you have digged a little, to rake it level, and then dig a little farther, and rake again, and so continue until you have finished your Quarters; but in case your Ground be fine Sand or the like, you may forbear raking until afterwards, as you shall hear anon, so as you lay it very level in your digging; also if your Ground be so small that you can reach to the middle with your Rake; then your best way and speediest is to make an end of digging first, and then rake it exactly: And having proceeded thus far, whether you intend your Plot for Grass or Knots, you are to tread it all over alike, and then rake it again, and by so doing your Plot will settle in every place alike, which otherwise it will scarce do, and then you may proceed to the perfecting of your intended Work; and if you make Grass-Plots, and do not lay Turf, but sow them, then your best way is after you have levelled the Ground to sow it pretty thick all over, and then to tread it in every place alike, and then rake it over, and then sow it a second time, treading it, and raking it handsomely over again, and in so doing the Grass will come up so thick and handsomely as the Weeds will not easily get the mastery, as sometimes it doth when it is sown too thin; yet nevertheless if any Docks or other great Weeds come up amongst your Grass, you are to weed them clean out, and then by timely and often cutting your Grass it will grow thick and pleasant; the truth is, if Grass be not cut once in a Fortnight at least in the growing time of the Year, it will not be handsome; besides its aptness to seed, and thereby spoiling the Beauty and Handsomeness of your Walks or Border.

After you have finished your Borders, Knots, or Quarters, as occasion serves, then you are to make your Walks, first pitching a range of Stakes just in the middle, only about a Pole or more asunder,

asunder, after the manner you were taught before, and according to the nature of the Level; but in case your Walks are very wide, then you are to have three Ranges of Stakes for the more exact laying of your Walks, but do not make the Fall on each side of your Walk too great or sharp, but rather a fine, almost undiscernable Fall, except your Ground be very apt to lie wet, so great a Fall is both unhandsome and uneasy, for such as wear high heel'd shoes; after you have staked your Walk, or before, you are to dig and level your Walk with its own Earth or Gravel: but in case the Earth lie too high, or be too good, it will be your best way to carry some of it away for a better use, than only to walk on, and in the room thereof to bring or lay either Gravel or Chalk, or the like, and when you have rough levelled your Walk, let it be well trodden or beat, that it may not settle unequally, after you have finished; and then having rough levelled as aforesaid, then lay on your fine Gravel, if you have two Sorts, and remember that if you lay your fine Gravel of a good considerable Thickness, you may once a Year, or once in two Years, new break over your Walks, and flourish them over with a little or no charge, whereby your Walks will be as new again. The order of laying your Walks is first to spread and lay your Gravel as it ought to lie, and then to tread it all over alike, and then to rake it again, and then with a Bearer made of a piece of Plank, to settle it all over, not bringing your Rowl upon your Walk until it be well settled, except it be a light wooden Rowl, lest you cause your Walks to lie in whamps; and after you have rowled your Walks once or twice in a place, at length it will be a good way to rowl them over-thwart with your light Rowl, your Walks will shape the better; also in case the Weather be very dry, it will be a good way after you have shaped your Walks, to water them well with a watering Pot, and then when they are so dried, as that you may walk on them, you may beat or rowl them as you see cause.

Take notice, that if your Gravel be of a very lean nature, and have no earthy Substance to cause it to bind, you may amend that Fault, by mixing a quantity of short Lome or Clay equally amongst your Gravel, but be careful you do not put too much, lest you make a worse Fault, therefore use the mean; much more might be said as to the making of Walks, as to the prevention of Worms casting, for which some use store of Salt or Soot, and also for prevention of Moss, &c. but being straightned for want of time, let this suffice.

The

The fittest and most convenient Season for making of Gardens and Walks, is the Spring, it being usually the most temperate and subtillest Season both for setting of Herbs and Flowers, as likewise for the making of Walks, there being oft a fine intermixture of Showers and warm Weather, as well as dry; but in case your Ground where you would erect a Garden be very much out of order, either being very much over-run with bad sorts of Weeds, as Nettles, Twitch, &c. which cannot be destroyed with once or twice digging, or if very unequal and out of level, so that it requires much raising in some Places, and abatement in other Places, whereby it will be apt to settle unequally, and cannot be so ordered on a sudden, as to continue handsome and level any considerable time: I say, in such Cases, it will be your best way to cleanse and level in the Winter before, at least before you intend to make your Garden; but it would be much the better to give it one Years Husbandry, and then you may crop it with some sort of Herbage, either Pease or Beans, and a crop of Turnips after them, taking the first Opportunity, that so they may be got off in good time, and so by twice or thrice stirring of your Ground in one Year, being careful to cleanse and level it at each stirring, as occasion requires, it will be the fitter and readier, and in better case to plant any Trees, and much easier to make your Garden so as to continue handsome the longer; and besides, you have the Season of planting before you, whereby you may finish that Work beforehand, and not deface or flubber your Garden after it is finished.

The next thing considerable, is the Seasons for the increasing and planting of the divers varieties of Herbs and Flowers, for the furnishing of the Garden of Pleasure: And first I will begin with those sorts commonly call'd Bulbo's, or Onion-rooted Flowers, something as to the shape of Onions, such as Tulips, Crocus, Daffodils, &c. and although all or the most of them are ordinarily, and may be taken up in the Spring and planted, both before, and in their flowering, and do pretty well if done carefully and speedily; yet it is not the surest and most proper Season for any of them that have such kinds of Roots, and therefore I would advise every one, if they may, to take another Season for the removing of them, especially if they be of such sorts as they make any special account of; for many times a Year or two is lost by removing in the Spring, and sometimes the Root is very tender, except they be taken up with Mould cleaving to the Root; and

therefore take this general Rule for all such kinds of Flowers so rooted, as I said before, that when the Flower is faded, and the Leaves of the Plant withered, you may take them up without any Prejudice to them; and so much the sooner if you prevent its seedings by gathering it or cutting off the Stalk when the Beauty of the Flower is past; the sure Seasons are *June, July, and August*; but if you stay until *September*, they then begin to take new root against another Year, and then your Season is not good for the purpose, but rather a hinderance: By what hath been said, you may easily observe, that some sorts may be removed a Month or more before others of like Nature, according to the early or late flowering of them; as likewise according to the Temper of the Weather or Season; for in a hot and dry time Flowers blow quick, and shed accordingly, whereas a more cool and moist Season causeth Flowers not only to continue longer in Flower, but also to be fairer in most Sorts, except they be of a very tender Nature; having taken up any of these sorts of Flowers we are speaking of, if you have any Intention of keeping them any time out of the Ground, which you may do to many of them for five or six Months, and sometimes more without hurt to them, if occasion require; you are first to lay them in the Sun, or in some Window where they may dry, lest being wet or damp, they should mould, or rot, or occasion their Springing before you are willing, which by taking wet, or lying in a damp Place, comes to pass sometimes, and are sometimes spoiled: But if your Roots are of a more hollow or spongy Nature, as *Fritillaria's*, and some sorts of *Hyacinths*, &c. which will wilt, or be limber, or thrive if kept a little too long out of the Ground, for such sorts, as also the Roots of *Ranunculo's*, if you be necessitated to keep them out of the Ground over-long, to mix with them some fine dry Sand, which will keep them very well a considerable time, but you must not keep them in a Place that is damp, or subject to moisture, lest they either spring or do worse.

What I have said concerning the aforesaid sorts, you may observe in some measure in the Roots of *Lillies* and *Martagons*, such Roots as are scall, but if necessary occasion cause you not to keep your Flower Roots out of the Ground, then it will be your best and surest Course to set them again as soon as you may conveniently; whereby the occasioning or spoiling their seasonable and handsome flowering, as also there the hinderling of their encrease is prevented, which sometimes happeneth by the too long keeping them

them out of the Ground, besides other Casualties; you shall observe that divers sorts being kept long out of the Ground, will begin to put out new Roots or Fibres; if you perceive it, get such into the Ground as soon as you can, for then they are more apt to spoil than before. In the planting or setting of your Tulips, let the Earth be at least an Inch above the top of the Root.

The next thing to be considered, is the way of encreasing these sorts of Flowers, and that is either by the sowing of their Seed, or by off-sets that encrease from the Roots of bearing Plants, which being taken off in due Season as aforesaid, and planted in a Ground made hollow and good, will in two or three Years become bearing Roots, but be careful you set not your Roots in Dung, lest they rot; as for the off-sets of the Crown Imperial, and Persian Lily, their off-sets are a great while before they come to bear Flowers.

Lilies and Martagons are encreased by the Scales taken off from the lower part of the Root, besides what encrease it makes of it self by off-sets, which in time will come to bear Flowers like the Mother-plant; let your Ground be good, and pretty free from Stones, your Flowers will thrive the better, and make the more encrease, and in case you use Dung about your Flowers, be sure it be very well rotted and converted to Mould, and then being well mixed with your Earth, will do better than used alone, for Dung is more apt to dry and shrink in hot and dry Weather, and apt to starve a Plant, if not supplied with moisture.

As for the sowing of these sorts of Bulbous rooted Flowers, it is generally so soon as your Seed is full ripe, or at least about September; but there is a great deal of odds in the time of their coming to Perfection, for Fritillaries, and Hyacinths, and Crocuses, comes to the flowering before Tulips, Crown Imperial, and Martagons; the most frugal way of sowing of them, is in Pots or Boxes made for the purpose, being fill'd with very good sifted Mould, do not sow your Seed too thick, cover it about an Inch deep, or thereabout, let their Situation be pretty temperate, and after they are two Years growth or more, you may take them up and Plant them in some thinner order, take them up when they have done growing as aforesaid: Take notice that Tulips are more apt to run down deep into the Ground than any other sort, and therefore to be more often taken up than other sort of Bulbous-Plants, your care must be to keep them clean from Weeds, upon all Occasions, as need requires.

The next sort to be spoke to is, Eminies or Anemonies, which is of that sort of Plant called Tuberous rooted.

These sorts of Flowers likewise are, and may be taken up in the Spring or Flowring time, and may be with less Prejudice than many other. Bulbous Plants, as being apt to draw new Root quickly, whereas Tulips are not so apt, but yet the best Season is (as I said of the foregoing Sorts) when the Leaves are withered, and their Springing Season is over, which is usually from the beginning of *June* to the end of *July*, and sometimes later in case the Weather continue dry; but when the Weather grows cool and moist, they begin to take new root again, and then it is not so seasonable to stir them, especially to keep dry out of the Ground; whereas those taken up, as aforesaid, and dried a time in the Sun, may be kept sound and well near a Year, especially if the Roots have any considerable Substance; but if, as I said of the foregoing sort, they lie damp, or take wet, they are liable to Spoil or Loss; they are encreased by parting their Roots, either in their growing Season, or when they are taken up afterwards; every little Crum being apt to grow, if they be not too much wither'd or dry'd: Also they are encreased by the sowing of their Seed, which the single sort afford pretty well (but not the double that I know of) whereby many Varieties are raised; if you desire to make encrease by sowing, you are to take notice of your Seed when it groweth near ripe, which you may know by its parting a little near the Stalk, so that in a little time after it will be fit to gather, otherwise the Wind will quickly blow it away with the Down in which it is wrapt; and being ripe, and pretty well dried, you are to part it, and gently rub it between your Hands with a little dry Sand, the better to separate it, and then to sow it in some Pots or Boxes for the purpose, in some very fine sifted Mould, if you add a little fine willow Mould with your Earth, I think it will be the better; do not sow your Seed over thick, and then cover it about an Inch deep with the like fine Mould; the most gainful Season to sow it in, is as soon as it is ripe; let the Situation be rather Shade than Sun, let them be kept moderate moist; you may likewise sow your Seed in the Spring; if your Seed be sown pretty forward, and the Earth and Situation very suitable; they may be forward enough to prick out in some thinner order, time enough to get Strength before the Winter following; but if you are not forward enough, then you must take the Spring, you must take some care of them in case of hard Weather, for I have known

known many miscarry in a hard or sharp Winter; the Season to plant your bearing Roots that were taken up in their fit Season is in *August* or *September*, some of them may Flower before, or in the Winter, if the Weather be any thing temperate, but chiefly forward in the Spring; but if you keep some of your Roots, and plant some in *February*, if Weather permit, and some in *March* or *April*, you shall have them Flower in several Seasons, according as you planted them, only remember that those you plant to Flower in the more hot Season, let their Situation be such as not to be too much in the Sun; for the truth is, their natural Season is the Spring, which is commonly pretty temperate, and therefore the more temperate, the more agreeable to their Nature, and in so doing you may enjoy the Pleasure of their Beauties the longer: Again,

Set not your Eminy Roots too deep, neither in wet nor strong cool Ground, lest they should rot, especially the more tender or delicate sorts, being set about an Inch or Two at the most is sufficient in the most temperate Ground; do not water your more choice Kinds until they begin to spring, except in hot and dry Weather, yet some in case of late planting, in case their Roots are very dry, do put them into Water to plump, which in such a case cannot hurt them.

Again, if your Eminies be of choice Sorts, trust not the Winter with them, but rather keep them until the beginning of *March*, except you plant them in Pots, &c. then you may begin with them sooner by housing your Pots until they have taken new Root.

Of those Flowers call'd Fibres, or stringy rooted Plants.

These sorts of Plants do much differ in their Usage or Husbandry from the former, especially Tulips, &c. and are most seasonably to be taken up to be parted, slipt, laid, and planted in the Spring, and most of them in their flowering with very little Prejudice as to their well-being, and indeed the most of them may with a little Care and Diligence be removed and slipt from *March* until *Bartholomew-tide*, especially if you take Notice of those Directions concerning the ordering of small Herbs, in that part that treateth of the ordering of the Kitchen-Garden, only take Notice, that those sorts that run up very much and forward into Spindles for Flowers, would be dealt withal something the earlier, or

after

after their chief flowering is over, and be sure that what Season soever you take, be careful to keep your Slips or Plants pretty moist, until they have taken root at least; also take Notice, that for such things as ordinarily endure Winter, and are hardy, as Pinks, Violets, and many others; for such you may begin in February to set them, as I have often, whereby they have gained so good rooting, that the trouble of watering them hath been saved.

Of Carnations and Gillyflowers, and their ordering.

ANd first of the sowing of their Seed, from whence ariseth very many Varieties, according to the Goodness of the Seed sown, and nature of the Air in which they are sown; and indeed few would believe the different Inclination of one and the same sort of Seed, being sown in the same Ground where it was sowed, and of the same sort in a contrary Air and Ground; the Observation I will leave to each Practitioner, and to the end you may have good Varieties, your Care must be to get or save such as come from good double Flowers, or else it will hardly be worth your Labour to sow and plant them: Having procured some Seed, you are to prepare a Bed which ought to be both rich and well prepared, and in a temperate Situation; do not sow your Seed very thick, and then cover it about an Inch deep or less with fine Mould, or you may spittle it in with your Spade; or you may sow it in Trails, but not very thick; or which is a more saving way, you may sow it in some old half Tubs, or Boxes for the purpose, and be careful to keep them clean weeded and watered if occasion require, and when your Plants are about Two or Three Inches high, you may take them up and plant them in some thinner order, giving them some Water at the planting, and afterwards, until they have taken new root, and in case they have been sown very thick, you must begin the sooner to plant them out, but if they are too small to plant out on Beds, then it were good to prick them out in such like things as I named, that is, Tubs, &c. if you remove whilst they are very small, you may set them the nearer together, and take up every other Plant afterwards when they are better grown, they may stand about half a Foot asunder or thereabout, where they may grow until you see what Varieties you shall have, and then you may take them up with some Earth with them, and plant them where you would have them Flower, not forgetting to water them at their first planting;

ting; the Season to sow them, is any time from the latter end of February to Midsummer, or a little later; they are pretty hardy, but being sown pretty timely in the Spring, they will be large rooted against the time of flowering, and accordingly will yield more Flowers, or more Branches, or Slips to encrease by laying, which is the only sure way to encrease from feeding, especially sometimes they will flower the same Summer or Autumn, if sown very timely.

These sorts of Flowers are likewise encreased both by slipping, and by laying, but laying is abundantly the surest way. But first, I will speak of the setting of their Slips. And first you are to prepare a Bed, which ought to be of very fine and rich Mould, and so situated, or at least such Provision made, that the Sun come not at them until they are rooted, otherwise one half Day's Sun may spoil your Labours, and frustrate your Expectation, especially if set any thing forward whilst the Sun hath any considerable Strength; the manner of slipping is as followeth: Make choice of such Slips as are pretty strong, not such as are small, weak, under Slips, if you may have better; neither such as have divers small Slips on them, but yet even such being set very timely in the Spring, do often thrive well enough, as I said; let your Slips be one entire Branch, and not spindled, the which you are to cut off close to the Body or Arm of the old Root, if short, otherwise you may leave Two or Three Joints, the which may spring out again; then take your Slip and trim off some of the lower Leaves, not leaving your Slip with too great or bush'd top, and then top the other Leaves even, and then cut your Slip even at the bottom of a Joint; and if it be pretty strong, you may slit it up to the next Joint or higher, if the joints be thick or near together; and then if you will throw them into a pail of Water for an Hour or Two, and then you may set them, having first put a little Earth or Clay to keep the Slip open; but if your Slip be weak, you may forbear slitting it, and then set them pretty near together, but not very deep, to smother the sprout Blade and then water them well, keeping them moist, not suffering the Sun to come at them until they be rooted, and then, but by little and little, yet giving them Air as much as may be without Sun, and when they are pretty well rooted, you may gently raise them or cut them out with a little Mould, abiding to each Root, and then plant them where you would have them grow, not forgetting to water them at their first planting at least:

Take

Take notice, that but few of those Flowers commonly raised of Seed, are apt to grow of Slips, in comparison of those sorts of old Flowers call'd Cloves, Carnations, Dovers, and some others; and therefore it will be your best way to propagate them, and all other sorts of choice Gillyflowers, by laying; the order and manner whereof followeth; only take notice, that the Season for setting Slips, is any time from *March* until *Bartholomew-tide*, if your Roots will afford such Slips I speak of; but the chief Season is *June*, *July*, and *August*. Now the end of laying, is that your Slips may take root before you cut them off from their Mother-plant, the manner is thus: Take the Branch or Slip you desire to encrease or lay, and with a sharp Pen-knife cut off some of the under Leaves, at least so many as are any way troublesome as to the performance of your Work, then make choice of that Joint that is most convenient either to lay down into the Ground, or in a lay-Pot, &c. and then with your Knife, beginning a little below the Joint or the under-side of it, cut it upward with a slit to the next Joint above, or more if the Joints be very near together; also if your Layer be stiff and not pliable, it will be best to slit it the more, slit it in the middle, yet so as your Layer may have convenient Substance; as likewise that part that is to feed it; then cut that end of your Layer where you begin to slit it, just at the bottom of the Joint where it is to take its root, and then with a piece of its Leaf, or a little Earth, &c. you may cause the Slit to keep open. And lastly, if it lie near the Ground, which ought to be made loose or hollow, you may bend down your Layer, and with a hooked Stick thrust into the Ground, keep your Layer in its place, laying about an Inch thickness of fine Mould upon it, about the place where it was laid, and then sprinkle a little Water on it at first laying, and afterward in case it grow dry; and in case your Layer grow so high you cannot bring it to the Ground, then you may make provision either with lay-Pots, of which there are divers made on purpose, with a Slit or Notch on the side, the better to let your Layer into the middle of your Pot, or other Convenience to like purpose; being filled half full of Mould at first, and then with a piece of Leather or Hat paring, to keep your Layer down, you may fill your Pot up with Mould, and water it as occasion requires; some cut the top of their Layer at first, and some do not, the matter is not much, and by this means you may quickly make a considerable encrease of your Gillyflowers; the time of their taking root

sufficient

sufficient to plant out is something different, for some sorts will be forward in rooting in Three Weeks or a Month, than others will in twice the time. I may say the like of the Season or Weather, therefore if you see your Layer thriving and lusty, you may open the Earth a little gently near where it was laid, and you may easily be satisfied whether it be sufficient to cut off, and transplant; your Layers being rooted, you may with the back of your Knife do away a little of the Earth, a little above the Place where it was laid, and cut it off, raising it up with its Mould with care, least the weight thereof should tear off the Root from your Layer, then with your Knife cut off that little remnant Piece that remains near the Root of your Layer, either close by the Root, or else cut it off at a Joint, that it may likewise take root, otherwise it may rot and prove prejudicial to your Plant, and then you may plant your Layer either on convenient Beds or Pots, as you think fit, remembering, as I oft admonish, to water and shadow at first planting, if occasion require; the Season to lay Flowers is, and may be, from the beginning of *March* until *Michaelmas*, if your Roots have sufficient Branches for the purpose; it is best laying hold on the first and most seasonable Opportunity, by so doing you occasion your old Root to make a farther Improvement, besides the Advantage you have in the forwardness of your young Roots.

Very much more might be said concerning these kinds of Flowers, as to their Advancement and Preservation; as also concerning the Artificial repairing and mixture of Earths, tending to the aforesaid end. But I shall say but little more than this, that a good midling tempered Mould or Earth that is fresh, and hath not been used in and about Plants of like Nature or Temper is naturally best; for it is an unquestionable Truth, that several kinds of Plants draw several sorts of Juice or Nourishment from the Earth, even that which is most natural to them, as is commonly to be observed amongst Husbandmen in changing their Crops upon one and the same Ground, being fresh and good for one sort of Grain, and not for another sort that grew on the same Ground the Year before, except in case the Ground be new, and in very good heart, and thereupon may bring one sort of crop Two Years together; but if you think your Earth be not quick enough, or otherwise defective, there are several sorts of Earth or mixture easily to be had to amend the Defect; as in case it be too heavy or cloggy, fine Sand, with a little willow Mould,

or Lime Rubbish of old Walls &c. and so on the contrary, as need requires; many good Flowrists make use of a little willow Mould to strew in the Hole where they set their Flowers to draw Root the quicker; overmuch may do harm, in causing your Flowers to be somewhat the more apt to Canker, &c. another thing to be taken notice of concerning these Flowers, is their Situation, which tendeth much to their Advancement, as to the continuing of them longer in their Beauty, and more large and stately in their Flower; and this is only by setting them where the Sun hath not much power, as in some Places where Trees keep off the violence of the Sun, or by planting them where they may not have above a quarter Sun, and that in the most temperate time of the Day; and this is one of the chiefest ends of setting Flowers in Pots, because they may so easily be removed from one place to another, as the Weather or time of the Year requires, for the Sun hastens Flowers to Perfection, causing them quickly to flower, and quickly to fade, and so to perfect their Seed; also in case of much Rain, it is good either to remove your Pots of Flowers under some shade, or to lay them side-ways, on the Ground; and although much wet be an Enemy to choice Flowers, yet convenient moisture is so necessary, as without it the Earth cannot give Life and Vigour to your Plants.

Again, for my part, when I have principal respect to the encrease and improvement of my Plants; I do not love to confine them within the bounds of a Pot, but rather plant them in some indifferent temperate Situation, where they may not be subject to any Extreame.

Another thing practised amongst those that delight in the fairness and trim growing of their Flowers, is pretty timely to crop off divers of the Spindles from their Plants, in case many do shoot forth, as in some sorts there do; as also divers of their Buds for Flowers whilst very young, leaving but a few, to the end they may be the larger.

Also for those that are apt to break the Pod too much up one side; you are for the more handsome and graceful blowing of your Flowers, before they are too much crackt, to open the Pods a little equally on each side, yet so as not to bruise or deface the Flower in the Bud; also besides the opening of the Pod, some use to wrap about them a thing called Ox-gut, which being a little wet, will stick and keep the Flower from breaking; others use other things, though not so handsome, as the Bark of Ashen Stick

Stick wrung off, being green and sappy, and cut into several Rings as it were, which serve to keep their Flower Pods in handsome order, some only tie them, either with Bass, Thread or Yarn; others in time convenient save the Wesand-Pipe of great Fowls, as Geese &c. and being cut into several Rings, serve to put over the Pods of the Flowers, thereby causing them to blow round and handsome.

Also amongst the several Inconveniences that *July* Flowers are subject to in their flowering Earwigs are not the least; for in little time, if not prevented, they will deface and put an end to the Beauty of your Flowers, by eating the sweet ends of the Leaves of the Blossom; and are likewise destructive to their Seed, if not destroyed in time; for prevention whereof, you are to stick up divers Sticks near your Flower Roots, and upon them to hang or fasten either some hollow Canes or Kicks, or the Hoofs of Cattle, into which things they will creep for shelter, and then every Morning at least, to take them off, and knock them on the Ground, and destroy with your Foot so many as you see; and then put those things in their Places again, not neglecting to do so every Day, once at least; some have used other means for prevention of these kinds of Creatures, as the setting their Pots in some shallow things that would hold Water, whereby these Vermine could not come to their Flowers, but thorough the Water; other Inconveniences do happen to some, whereof I have spoke already: But let this suffice for the present.

Of the ordering and encreasing of Auricula's, Bears-Ear (or as some call them) French-Cowslips.

BEcause of the great respect that this pretty sort of Flower hath, by reason of the abundant Varieties of Colours it is apt to run into by sowing of the Seed, I shall set down a little concerning its encrease; and first of the sowing of the Seed, the which is not altogether so hard to get; I mean such as is aptest to bring good Varieties, as heretofore; for now, not only Dutch and Walloon Flowriffs, which were the most diligent Savers and Sowers hereof, but divers of our English Flowriffs and Gardeners, do save and sow, and raise great encrease thereof, and therefore the easier to procure; and being furnished therewith, you are according to your quantity to provide either some Brand-Pan like a Milk-Pan, or Flower-Pots, or any the like convenient thing (for you are not to sow it on Beds as other sorts of Seed are, or

may) then you are to fill your Pan, or like Provision, with such rotten Earth or Mould, as is to be found in old decayed Willows; let it be sifted, especially the uppermost of it, and thereon sow your Seed not over thick, for that will prove some loss if your Seed be good; then cover it with some of the like sifted Mould about half an Inch; let your Situation be temperate, rather Shade than Sun, especially in the Spring. The Seasons are from the midst of *September* to the middle of *November*, at which Seasons I have had it come very well; you are to take some care of them in the Spring, being apt to be spewed or raised out of the Ground, especially by small Frosts hollowing the Earth: Indeed it is a Plant of shallow rooting, that it is very apt, though pretty well grown, to be turned out of the Ground; and therefore we find that they do best hold and encrease, being planted in a pretty soft kind of Ground, otherwise a Place that hath but little Sun, for they are ordinarily hardy enough as to cold; sometimes by sowing too late or too dry, or over deep covered the Seed, will lie until the second Season before it appears; but being sown in fit Season and Order, accordingly it will come up about Seven Months after; you may very much preserve your young Plants in the Spring, by covering them conveniently with Rats Mats, both from the Sun, and Frosty Mornings, let them have reasonable Moisture, as occasion requires; and when your Plants are about the breadth of a Penny, you may prick them out in Pots, or other the like convenient things, until they have got more Strength to be planted on convenient Beds, the which you are to trench with either new Cow-Dung, or other new Dung, whereby the Worms will not be so apt to turn them out, until they have got some convenient hold in the Ground; in some sorts of Ground, they will not thrive unless they be set in Pots, and have convenient Air, but little Sun, and that temperate; your old Roots must be new earthed or moulded once a Year at least, they are so apt to work out of Ground; if you do plant in Pots, as most do their choicest, you are to fill your Pot half full of good rotten Cow-Dung, whereby your Flowers will be fair, and not starve in such narrow Bounds; let them not want convenient watering; they are sometimes apt to root, especially being planted in a wet season at the declining of the Year; they are very apt to grow off Slips but the Spring is the best Season; for towards the declining of the Year, the Worms are more apt to turn them out of the Ground: More might have been said as to the ordering of this sort of Flowers,

Flowers, and for the choice of Colours to bring the most and best Varietys; but being straitned, let this suffice.

Of Primroses and Polianthers, &c.

THE Seeds of any of those sorts that bear Seed, which are chiefly the single, of several Forms and Colours, being sown either in the Spring or *Autumn*; for I have sown in both Seasons. and have had very pretty Varieties come, and some contrary to their Mother-plant; their Situation ought rather to be Shade than Sun; if you sow in *Autumn*, defer not, that so your Plants may get Strength before the Winter, which will be apt to heave them out of the Ground, and make you some work to prick them in again: I have sown something late at that time of the Year, and have had them come up very well in the Spring following. I have likewise sown in the Spring, and the next Spring after I have had fine Varieties of Flowers. The savingest way to sow, is in Pots, or the like, and a shady Situation is best; they grow and encrease well of the Slip, and parting of them, and new planting of them once in a Year or Two, causeth them to flower more frequent, both early and late, in case of temperate Weather.

Hepatica's are likewise encreased by sowing, as well as by parting their Roots; also the several Varieties of *London* Tufts, or *Pride of London*, is encreased the same way.

Now by what I have written, you may easily guess what Improvements may be made by sowing of the Seeds of divers Flowers and Herbs, which if I thought were necessary, I could have enlarged upon.

This already being sufficient for any ingenious young Practitioner, I shall conclude as to this.

To the end any young Practitioners may readily know what to seek or enquire after for the furnishing of their Garden, I have here under set down a Catalogue of Flowers, as I have of the Herbs at the end of the Kitchen-Garden; both such as are yearly to be raised of Seed, call'd *Annuals*; as also others of divers Kinds; and because many are very much taken and affected with furnishing of their Flower-Pots, for the adorning of some Rooms in their Houses, &c. I have set down the Names of divers Sorts and Kinds, that are fit for the aforesaid Purposes, in regard of the length of their Stalks or Branches; as also of such as are only for Ornament in their places where they grow, or for Nofegays: And first of those call'd *Annuals*, yearly to be sown.

Adonis.

Adonis-Flower.
 African-Marygolds.
 Scarlet-Beans.
 Coventry Bell flowers.
 Great blew bind weed, or Con-
 nuvolu's major.
 Small bind-weed, or Connuvo-
 lu's minor.
 Catch-fly, two sorts.
 Candy-tufts, two or three Va-
 rieties.
 Fennel-flower or Nigella, two
 or three Varieties.
 Fox-gloves, white and red.
 Small white Flax.
 French Honey-suckles.
 Honesty, or white Sattin.
 Hollhocks, double and sin-
 gle.
 Larks-heel, or Spurs, divers
 Varieties.
 Lupins.
 Melancholy Gentleman.

Moth-mullins, four or five Va-
 rieties.
 Marygolds, double.
 French Marygolds, two or three
 Varieties.
 Princes Feather, two sorts or-
 dinary.
 Princes Feather, or Amoran-
 tus, divers Varieties.
 — tender.
 Pearl-grafs.
 Tree Primrose.
 Double Poppies, divers Va-
 rieties.
 Indian or Musk Scabious, di-
 vers Varieties.
 Sianus, or Bottles, divers Va-
 rieties.
 Spanish Saffron.
 Snap-Dragons, divers Varie-
 ties.
 Stock Gilly-flowers.
 Venus's Looking-glass.

*These are likewise raised of Seed, and are likewise encreased by
 slipping, parting their Roots, and laying, fit to furnish a Flow-
 er-Pot.*

Champions.
 Canterbury Bells.
 Columbines, of divers Vari-
 eties.
 Cranes-Bill, of divers sorts.
 Carnations, or Gillyflower.
 Everlasting Pease.
 Fraxanella.
 Goats-rue.
 Whitson-Gillyflowers, single.
 Wall-Gillyflowers, single.
 Stock-Gillyflowers, double and

single.
 Hollhocks, double and single.
 Sweet John.
 A double white Flower, call'd
 white Marygold,
 I suppose of the kindred of the
 Maths.
 None-such, or flower of Bri-
 stol, single.
 Pinks double and single.
 Snap-Dragons.
 Spanish-tufts.

Throat-

The English Gardener.

FFF

Throat-wort, a sort of Bell- | Vallerion, red, and the greek,
flower. | both white and blew.

These are generally increased by slipping and parting, and fit for a Flower-Pot.

Auster-aticos, or Italian Star-wort, apt to run in a Garden.
Batchelor-Buttons, or double Champions, four or five Varieties.

Peach-leaved Bell-flowers, both blew and white.

Double Crowfoot, divers sorts, besides the more choice sorts,
known best by the Latin Name *Ranunculo's*.

Crimson Cardinals-flower.

Double Featherfew.

Hungarian Dead Nettle.

Spanish Knap-weed.

Lichines, or double None such.

Ladies Smocks-double.

Live-ever, or Life Everlasting.

Blew Marygolds.

Periwinkle, three or four Varieties, besides the great sort.

Double Rockets, or Whitson-July-flowers, three Varieties.

Double Sope-wort, a busie runner in a Garden, both white and
purple.

Double Sweet-Williams.

Double Wall-flowers, three or four sorts.

Willow-flower, a troublesome Guest in a Garden, though pretty
for a Flower-Pot.

*The Names of other sorts of Flowers, both Bulbous and Tuberous
rooted, fit to furnish a Garden, and adorn a Flower-Pot.*

ANemonies, or Eminies,
many Varieties.

Crown Imperial, a double, and
two sorts of single.

Corn-flags, two sorts.

Frittilaria's, several Varieties.

Flowerdeluces, Bulbous, and Tu-
berous, very many Varieties.

Hyacinths or Jacynths, divers

Varieties.

Indian Iuca.

Kings-spear, yellow and white.

Lillies, four or five Varieties.

Molies, several Varieties.

Martagons, six Varieties at
least.

Munks-hoods.

Pionyes, six or seven Varieties.

Perſian

Persian Lily.

Star-flowers, divers Varieties.

Tulips, abundant in Varieties.

Bulbous Violets, of a large sort.

The Names of divers other pretty Flowers, fit to furnish a Garden, and some of them may serve for the Flower-Pot, especially if they grow in rich Ground, or stand until they are fully and compleatly blown, most Bulbous Roots.

Bulbous Violet, two or three sorts.

Crocus and Saffron-flowers, many Varieties.

Colchecoms, double and single, five or six Varieties.

Grape-flowers, Varieties.

Hollow-root Flower, of some call'd Dwarf, or Ground-

hony-suckle; of others, a Fumetary, two sorts.

Marracock, or Passion flower.

Ranunculo's, besides those I have mentioned before.

Sow-bread, Varieties.

Spider wort, Varieties.

Winter-wolf's-bane.

Other sorts fit to furnish a Garden, &c.

Barren-wort.

Bears ear, or French Cowslips, and Bears-ear-sanicle.

Cowslips, and Pagles, divers.

Hepatica's, four Varieties.

Jerusalem-cowslip, two sorts.

Crismas-flower.

Dassies, divers, double.

Indian-Cress'es, or Nasterian Indicum.

Lily of the Valley.

Marvel of the World.

Mandrake, Golden Mouse ear.

Navel-worts, three or four Varieties.

Pances, or Hearts-ease, several.

Primroses and Polianters, divers.

Sultans flower, or Turkey-Corn-flower.

Violets.

I forgot to mention it before; it will be your best way every Year to raise your choicest and tenderest Annual Plants on a hot Bed, I mean, the finest sort of Amaranthu's, Perpurio, African Marygolds, yellow Larks-spur, with divers others, and by so doing, you may save Seed of them most Years, otherwise you may miss.

The manner of making a hot Bed, is set down towards the end of the Kitchen Garden, to which I refer you; as for others, you

you may sow them in several places in Trails, or otherwise a few in a place.

Thus I have set down the ordinary Names of many Varieties of Flowers; and although I have not observed so handsome a Method as might have been wish'd, yet it may sufficiently answer my end, namely, that young Practitioners may know what to seek or enquire for, for the aforesaid purposes.

Here followeth the Names of divers Flowering-Trees, which are pretty Ornaments to help to furnish a Garden, &c.

Apple,
Peach,
Pear,
Cherry, } with double Blossoms.

Melastom, encreased chiefly by sowing, sometimes by laying.

Jessamines, several, by Suckers or Layers.

Shrub-mallows, by laying.

Honey suckles or Wood-bines, several, by cutting and laying.

Gilder-roses, by Suckers and laying.

Lelacks, two or three sorts, as the former.

Siringa, by suckers, &c.

Laburnum, by Seed.

Senas, two or three sorts, by Seed, &c.

Clematis, double and single, by laying.

Prim or Priner, being brought into a Tree, is pretty for Flowers in its Season, though common.

Bladder-nut suckers.

Laurus Tinus, by laying, sometimes by cutting.

Pomegranate, double and single, of some is housed, encreased by laying, also of Seed.

The Names of some sorts of Ever-green that are hardy, the most of them are encreased by cutting, and laying, some of Seed.

A Llaturnus, or ever-green Prinnet.

Arbutus, of some housed, but doth well in a warm situation.

Arbor-vitæ.

Box, three sorts.

Bays ordinary.

Cherry-bay, or great Laurel.

Laurus Tinus.

Cypres.

Fir-tree.

Q

Holly

Holly, both red and yellow-berried.	Pine-trees, two sorts.
Piracantha.	Yew-tree.
Periwinkle, great and small.	Ever-green Oak.

The Names of a few, of tender or housed Greens, more easie to encrease than preserve.

Orange.
Limon.
Citron.

Olianders.
Mirtles, four or five sorts.

With many other sorts, which at present I cannot call to mind.

Amongst those sorts of Plants mentioned in this Book, these are fit to plant about Arbours, which being often and seasonably clipped after they are spread and tied in every bare or naked place; as occasion serves, will thicken, and be handsome, and your Arbour will endure and uphold it self with little Repair, but by the neglect of the former Directions your Arbour will quickly run to ruin.

Sweet-bryer.
Honey-suckles.
Clematis.
Jessamine.
Scorpion Sena.
Prime or Prinnet.
Tamarisk.

Also Plumb-trees, with divers other the like.
But if you would have it always green, then
Cypris, very good.
Piracanthas.
Filaree, none better.

Roses, white Frankford, &c.
Also if any desire it, white
Bush will make a very durable
Arbour.

Allaturnus.
Holly, or
Laurels, &c.

As for Hedges in Gardens, they are and may be made of several sorts of Shrubs, as every one fancies, but it is best to make them of one entire sort of Stuff, because of their sutable or handsome growing together; for being mixed, one sort differs in growth from another, some requiring to be cut twice to others once: By the often clipping of your Hedges, they will grow thick, strong, handsome, by the neglect the contrary.

Hawthorn, or white Bush is best.
Prime.

Gooseberries, or Currans, expect to be little and mean Fruit, if you keep your Hedge handsome.

Sweetbryer, it must be cut as oft as Grass, else not handsome.

Suckers of Plumbs, and of some young Horn-bean, &c.

If you would have them always green, you may set

Box, the English is the speediest.

Filare.

Holly.

Laurus Tinus.

Piracantha.

Also Feriwinkle, for low Hedges, being oft cut will be handsome.

Also Melerions, being planted in a Strait Line, as an Hedge, will in their flowering Season be very sweet and pleasant, and so much the more acceptable, being early in flowering.

Perhaps it might be expected by some, that I should say something as to the observation of the Moon, in Sowing, Planting, Grafting, and Pruning; but the truth is, I have been always so incumbered through the multiplicity of Business, necessity being likewise present always with me: So that I could not either take the opportunity, or make observation of any state of the Moon, and the success thereof, in any of my Labours; but assuredly, notwithstanding the best of my Diligence, I have not had always like success, where ever the Fault was: But I shall set down a little what some others have writ concerning the observation of the Moon. And first, one saith, That to have Plants or Seed grow speedily in height, you are to sow them in the encrease of the Moon, both in Light and Motion, and posited in an airy Sign.

But to have your Plants to take best hold downwards in the Root, then to let the Moon be in an earthly Sign.

The same Author saith likewise, That no Herb or Fruit, either set or sown in the Wane of the Moon, hath that goodness of relish, that is naturally proper to that Herb or Fruit, only he doth except Pease, which he saith being sown in the encrease of the Moon, will still be blowing with blossoming.

Also that Vines or other Trees should not spring or shoot too fast, you must prune them in the Wane of the Moon.

Also that things may keep sound, and last long, &c. from worm-eating, you are to gather or cut them in the Wane of the Moon. Thus far Mr. *Ramsley*.

Another writeth, That it is best grafting at the full Moon, as causing Grafts to come away with most Vigour, but the Wane causeth them to bear over-soon.

Others appoint two or three Days before, and as much after the Change to Graft in ; some also affirm the Wane of the Moon best to inoculate ; but if the former Rules be true, this must be otherwise : So that you see here is difference in Judgment, but let every one endeavour seasonably for the time of the Year, and suitably for the kind of Stock and Fruit, and exact as to the right Form and Manner, and then there is hope of Success, be the Moon in what state it will. I will set down one thing more, which I read in Mr. Wing's Almanack, 1661, the which I also, as I remember, did read, at another time in one of Mr. Booker's Almanacks. His words are these : *It is a common Observation in Astrology, and confirmed by Experience, that what Corn or Trees soever are set or sown, when the Sun or Moon are eclipsed, and the Infortunate Planets predominant, seldom or never come to good.* And again he saith thus, *It is a common and certain Observation also, that if any Corn, Seed or Plant, be either set or sown, within six hours either before or after the full Moon in Summer, or before or after the new Moon in Winter, having joined with the cosmical rising of Arcturus and Orion, the Hædi and the Siculi, is subject to blasting and canker.* And thus much I thought good to set down concerning the Observation of the Moon, out of other Mens Writings ; but as for the many Rules concerning the Three Parts of Gardning which I have written, I have only made use of my own Practice and Observation, (except the Catalogue of Fruits which I have mentioned) although in some Places I have written as if I had set down other Mens Judgments ; but assuredly the method is my own, which I commend to every one that desires to practice the nearest way to the Art of Gardning.

A
S U P P L E M E N T
T O T H E
English Gardner.

C H A P. I.

Approved Directions to know what sort of Earth is proper for every kind of Fruit-Trees, and to know whether it be proper to Dung Trees or not.

TH E S E very necessary Rules ought to be seriously weighed by all Gardners, and Planters of Fruit-Trees, or else their Labour often proves in vain; and in this case observe,

The Wilding, the Pear, the Apple-Tree, also those we call Paradiſe; likewise the Plumb-Tree, and Figg-Tree, well agree with all manner of Earth, hot or dry, cold or moiſt, provided it be deep enough, that is, at leaſt Two good Foot and a half, or Three Foot deep; Figg-Trees do not require ſo much.

Quince-Trees do not thrive well in light dry Ground, growing yellow too eaſily. Almonds and Stone-Peach-Trees flouriſh better in this than in ſtrong Earth, in which they are too ſubject to Gum; and thoſe ſtrong Earths are fiſter for Plumbs, Meriſiers, ſmall bitter Cherries, Goſeberries, Raspberries, and the like. The Vine requires moderate dry Ground, and in it produces the better

better Grapes, if commodiously exposed to the Sun; for if the Earth you plant them in be strong and cold, the Vine affects it not, but in producing brings small dry Grapes. Cherries will thrive in light dry Ground, but take much better in a clear Mould; and so of others.

In these Cases it will not be amiss to consider, that the Ground has Effects likewise upon such Grafts as are placed on Stocks already fixed in it, of the Kinds I have mentioned; for a Pear grafted upon a free Stock or Quince; for Peaches on Almond-Trees or Pumb-Trees, &c. it holds very well, but yet the Earth has not the same Effects as to the good Taste, as it has to the Vigour of Fruit-Trees. Winter Boon, Chrestien Pears, Pellition Lauface, and Thorn Pears, &c. will ever remain insipid, or most of them mealy or stony in cold moist Ground, whether grafted on Quince-Stocks or Wildings, especially for Dwarf Standards; and the like is to be observed in Panies, Peaches, &c. For these kind of Fruits require a pretty dry Ground; and particularly such as is well dreined with Gutters, or studied Decleveties, the Ground naturally being moist, for though it is to be noted, Fruit-Trees are commonly vigorous in strong Earth, yet the Fruit rarely acquires the Delicacy of Taste that in other more proper Grounds it might have, and which it meets withal in drier and lighter Grounds.

The Gardner must not conclude it sufficient to have a Garden or Orchard well cultivated for Tillage, but over and above have regard yearly to improve the Earth, which will lose of its Vigour; and be sure to remove the Stones and Weeds out of the Alleys, as from the Glass-Plats and Borders, and the Trees always free from Caterpillars, Snails, Moss, and other Incumbrances which infect and sicken them.

C H A P. II.

Evils in Fruit-Trees remedied by Manuring, Pruning, &c.

AS for dunging Fruit-Trees, it may be as well too much as too little; and in this also is to be considered what Soil of this Nature is most proper. Some little matter of it has been hinted in general already, but now I come to Particulars very useful and necessary to be known.

Trees

Trees that have large Roots draw much Strength from the Earth, which being weakened thereby, stands in need of a Supply; but too much Kindness to them this way, as some call it, suffocates the Root, and causes Cankers and such like Defects, that much annoy Fruit-Trees; therefore it is to be enquired into how they ought to be ordered in this case.

If the Roots lie not too near the Surface of the Earth, but tend downward, reaching to a sufficient Moisture, then open about the Bole a Foot and a half deep, and put in Dung, mixed with good fresh Mole; let it be either rotten Horse-Dung or Cow-Dung, and cover it up in the Spring, laying the Sods you pared from the Surface even, and treading them down hard, and to settle the Earth, pour some muddy Water about it; but this needs not, unless you see some defect, as the yellowness of some Leaves and Branches, the Tree blossoming much, but bearing little Fruit, and that small, which denotes that the bottom of the Earth lies deep in wet and cold Earth, not affording a sufficient Heat in Nourishment, but where the Roots lie shallow, near the Surface, so that the Sun has Power to dry up their Sap. Dung is not required, for the Heat of it would help the Sun to wither them the more, and waste their Vigour; but in this case take Mud out of some slimy Lake or Pond; mix it with good Mould, and paring off the Sods of Grass about the Tree, cover the bare Ground with the prepared Earth, hill it up high, half a Foot at least, that it may shelter the Roots that lie near the Surface; then lay on the Grass Turfs, and press it down hard, settle it with Water, and the nearness of the Roots to the Surface is known by the withering of some Leaves, or their turning yellow or whitish sooner than ordinary; the Bark, if young Trees, wrinkling, if old, cracking or chopping; and here take care to cut away all the Suckers from the Roots, and prune superfluous Branches, that the bearing ones may have the greater Nourishment to enable them to bring forth Plenty; and where there is none of these Defects appearing, good and careful pruning will be a sufficient Advancement; however, in sharp Winters lay long Dung, or Litter taken out of a Stable where Horses are kept, about their Roots, which in the Spring you may take away, and cleanse the Ground, lest Insects breed there, and ascending the Tree, destroy the tender Buds when they shoot forth. In hard stony Ground the Roots of Trees often meet with Obstructions in their running under the Earth. The like is chalky Ground,

Ground, and therefore these Earths are not fit for an Orchard. Where the Ground is nothing but clear Sand, it is a Folly to plant Fruit-Trees there; for they cannot thrive in it, nor will dunging do any great Kindness; nothing can better it but a binding fat Mould, that must be brought in great Quantity, and trenched in, much of the sandy Ground being removed, that it may lie the better; but this is so chargeable that it is hardly worth while, nor will it be lasting, unless renewed. If the Ground be too light and dry, water it well in dry Seasons, or float it with Water, if you have a Conveniency; but if too wet or slobbish, make Dreins as low as you can, that the cold hurtful Water may by degrees be taken off from afflicting the Roots.

C H A P. III.

Further Means to Preserve and cause to Flourish Standards and Wall-Fruit. To know the Diseases and Defects in Trees, and their Remedies, in many rare Secrets, for want of which many choice Plants die.

I shall say yet something more to prevent the Evils that fall upon Fruit-Trees.

Gum is hurtful to Trees, in hindering the Sap from rising to the Branches, especially if it gets into the Joint of the Graft; and if this be common to a Peach, grafted on an Almond Stock, and the Growth be hindered thereby, Graft others on Plumb Stocks, and the Nature of the Ground will hinder the Defect.

If Pears be grafted on Quince Stocks, and grow yellow, the Remedy is to remove them.

If Rats gnaw the Barks of Figg-Trees, or other choice Wall-Trees, which in Winter they are apt to do, upon the first Marks of their Teeth you see, set baited Traps to take them, or lay Ratsbane in their way.

There is an Insect called a Ton, that breeds at the Foot or Roots of Trees, especially Wall-Fruit, very fatal to them, eating and poisoning the Bark, and so much of the Root as it can come at. To remedy this, open the Root as deep as you see convenient, take away all the old Earth, and place new, sprinkled a little

little with the Dregs of Olive-Oil, and so cover the Root up close again; and by this means they will be removed.

There is yet another dangerous Infester of Wall-Fruit, and especially Wall-Pears, called the Tygers, sticking close to the back of the Leaves, and sucking out all the green Moisture, so that they wither away. This by some Gardners is held incurable, but by sprinkling the Leaves and Branches with Tar Water, the Remedy is wrought.

If a Distemper and Languishing proceeds from a Tree by being ill-conditioned before it was planted, the best way to remedy it, is to pull it up, slit the Bark of the Roots, and replant it in fresh Mould; but if it be infested with the Canker, and has a poor Foot, then make Fewel of it, for it is not worth its Incumbrance, as not hopeful to thrive, place one more likely in the room of it.

As for Pear-Trees or Plum-Trees, about Forty Years bearing is sufficient; for then they have spent their bearing Strength, and ought to be removed, that young ones may be planted in their Place, unless you have such a large space of Ground as to spare a Continuance for the Service they have done, or in Expectation of the little Fruit they are capable of producing.

C H A P. IV.

A Supplement to the Kitchen-Garden, as to Herbs and Plants, how long they Flourish, and when Decay, and ought to be removed; with other Matters.

THough in the Body of this Book there are many things mentioned that might be sufficient to furnish out a Kitchen-Garden to great Advantage; yet seeing of late, Plants and Herbs have been brought from Foreign Parts, and improved here, that nothing may be wanting to render this useful Labour Compleat, I shall not be sparing in any thing that may give the Reader or Practitioner that Satisfaction he may expect.

To prepare a Garden for this use, that may at all times furnish you with Herbs, Roots, and the like, over and above what has been said already. Many have desired to know the continuance of Kitchen-Garden Herbs and Plants in their full Virtue, and when in the proper Season, or critical Time to be gathered and used, which from long Observation having found out, I shall in the first place speak somewhat of this Particular, so necessary to be known; with other Matters.

As for Asparagus, reckoning from the time it is first sowed or transplanted, it ought not properly to be gathered till the Shoots be of a competent Thickness, which happens not till the third or fourth Year after; and provided they be placed in good Ground, well cultivated, they may be suffered to stand Ten or Twelve Years; but if by Accident there be any decay in them sooner, take them up, and lose not the Benefit of so much Ground as their spreading Roots encumber.

Raspberry, Gooseberry, and Currant Shrubs will last, bearing well, Eight or Ten Years.

Artichokes must be renewed, that is, replanted in fresh Ground the third Year.

The Borders of Hyssop, Wormwood, Lavender, Marjoram, Rue, Rosemary, Sage, Thyme and Violets, if not hurt by extreme Frosts, or blasting Winds, will subsist well in their Places Four Years, if Care be taken to clip, prune, and cleanse them from Incumbrances every Summer.

Alehoja, or Wood-Sorrel, musked Charnel, Mint, English Chives, Tarragon, Sorrel, Patience, or Sharp Dock, Samphire, Macedonian Parsley, or Alifanders, Trip-Madam, &c. continue in their Places, and retain their Virtues Four Years. Strawberry Plants continue good without removing, Three Years.

Succory, or wild Endive, ordinary Parsley, Annis, Fennel, Burnet, Scorzonere, and Common Salsify, last Two Years. Leeks both to cut, and for Chards, and Cibouls, last only a Year, holding from one Spring to another.

Bourage, Bouglou, red Beet-Roots, Skerrets, Spanish Carduus, Carrots, *Artichokes* Cabbages, Collyflowers, Citruls or Pumpions, Harts-horn-Sallad, Potirons, or flat Pumpions, Parsnips, Leeks, &c. keep their Places well Nine Months, reckoning from the time they are sowed in the Spring, to the end of Autumn.

Garlick, Bassil, Nasturces, or Capuchin Capers, Cucumbers, Muskmelons, Onions, Shalots; and the first, or Summer Turnips must be taken up in the Spring and Summer, to give place to a new Supply.

Arach, or Orage, white Endive, ordinary Charvil, Succory, Garden Cresses, and all sorts of Lettice, whether Cabage, or to tie, take up the Ground near two Months.

Radishes, Purslain, and ordinary Charvil, flourish five or six Weeks, and then their best being past, the Ground may be better employed for the rest of the Season. Hasting-

Wintering Peas and Beans continue on the Ground seven Months, reckoning from *November*, when they are to be sown; but common Beans, Peas, and Arico's, or French-beans, may be disincumbered in four or five Months.

Spinage and Mithra keep their place all Autumn and Winter, and therefore convenient to be planted in such Places as things are to be planted in, that only last the Summer: There are some things that we may properly place in the Kitchen-Garden, that will not bear the Fury of the Winter; and therefore, seeing the Ignorant, not knowing they require to be housed, or covered, may destroy them, in setting them stand unseasonably abroad, I thought it very necessary to mention them. And these are

Carduus, Cellery, Artichoke heads, the white and the wild Endive; all that are known by the Denomination of Roots, as Red Beet Roots, Carrots, &c. Likewise Pumpions, Citruls, or common Pumpkin, Shalot, and Garlick, are to be taken care of, in covering or housing, or the bleak Winds or Frosts will much impair their goodness, if not destroy them. As for others, they will much better endure the Cold, and require not such care to be taken of them, *viz.*

Partly, Fennel, Cabbage, Trip-madam, Balm, Asparagus, Sorrel, Cibouls, Samphire, Mint, Tarragon: However, they are at a stand all the Spring, and neither sprout nor shoot, unless forced by hot Beds, (to make which you are directed before in this Book) for indeed by forcing, even in cold Weather, in the depth of Winter, a forced Spring may be made, as I have elsewhere shewed, to make Seeds and Plants spring, out of their proper or natural Season; though Garlick, Onions, and Cabbages, are not proper for hot Beds; yet most sallading and tender Herbs may be produced thereby, as Lettice, Cresser, Charvil, Mint, &c. So that with Industry, Seasons seem in this Case as it were at all times to be present.

C H A P. V.

Directions for the Seasons that properly produce Herbs and Plants; what may be removed and what continued in the place where sowed, with the manner of ordering them, &c.

TO know the Seasons of your Herbs, Plants, &c. and how they bring forth in the Circle of the Year, is very proper and necessary to be known, that so the Ground may be proportioned

tioned, and no hindrance or waste be found in a well cultivated Garden; and of these in their order.

Note, Among Kitchen Plants, Herbs, &c. there are some sown to remain in the place they are first in, others to be transplanted elsewhere, and some again both ways prove very well; some multiplied without Seed, and others transplanted whole; some cut to be transplanted, others not; some bear several times in a Year, and last no longer than a Year; others are more durable; some perish after their first Produce.

The first of these are almost all Red Beet Roots, Radishes, Carrots, Parsnips, Skarrets, Turnips, Maches, Reponles, Scorzoner's, Salsifies, Harts-horn Salad, Garden Cresses, Shalots, Spinage, Beans, Charvil, Garlick, Lettice to cut, Sorrel, Patience, or Sharp Dock Leaves, Pease, Purslain, Onions, Cibouls, wild Endive, or Succory.

The second that prosper not without being transplanted, are Cellery, Chard, Beets, the greatest part of white Endive, long and tied Cabbages, unless sown very thin, or thinned when come up, most Musk-melons, Cucumbers, Citruls, or Pumpions, Petirons, or Flat Rumpions, and Leeks.

The third are indifferently, either continued in places of their being first sown in, or else transplanted, are Asparagus, Fennel, Basil, Annis, Bonglos, Bourage, Carduus, Capuchin Capers, or Nasturces, Ciboules, Thyme, Savoury, Musk, Charvil.

The fourth multiplied without being sown, are Aicluja's, or Wood Sorrel, English Cues, Violets; for the Roots being naturally in thick Tufts, may commodiously be separated into many parts. Artichoaks are propagated by their off-sets, eyes, or slips. Round Sorrel, Mint, Trip-madam, Balm, Tarragon, &c. come within the like compals by their branches or layers, that take root where they touch the Earth; the two last over and above have the advantage to multiply by Seed, as at some time Artichoaks are prone to. Strawberries propagate by their runners, Gooseberries and Curran Trees by their slips, succours, or cuttings, which also take root. Marjoram, Lavender, Wormwood, Sage, and Thyme, propagate by their branches taking root at their joints, and have also the Advantage to be multiplied by their Seed.

In the fifth place are placed those Plants or Herbs which we cut off some part either of the Leaves or Roots, or both, as occasion requires, in order to transplant them, as Artichoaks, Cellery,

lery, Chard, Beets, Leeks, &c. as also others, whose leaves must not be cut at all, though it be proper to trim their roots a little, so to refresh them, and these are Succory, Endive, Savory, Sorrel, all Lettice to be transplanted, Aletujs, or Wood-forrel, Arach, or Orage, Boudies, Basil, Borage, Anchus Capers, or Nasturces, Cabbages, Strawberries, Camphire, Marjoram, Musk-melons, Citruls, or Pumpions, Cucumbers, Parslain, and Radishes, to be transplanted for seed.

The Plants or Herbs being long forth several times in a Year, yet last for several Years, are Patience, or Sharp Dock Sorrel, Wood sorrel, Burnet, Charvil, wild Endive, or Succory, Macedonian Parsley, or Ailsanders, Mint, Tarragon, Samphire, Parsley, Fennel, an Edgings, or Sweet Herbs.

Those that produce but once a Year, yet last bearing several Years, are Artichoaks and Asparagus.

Those that cease to be after their first Production, are Endive, Melons, Pease, Beans, Carduus, Citruls, or Pumpions, Cucumbers, Onions, Leeks, Cellerly, Arach, or Orage, and all Plants, whose Roots are only in use, as Red Beets, Carrots, &c.

Now in the Culture to produce and preserve them in good state for use, consists in one main point, in placing them at their distances, that they may flourish the better; also in trimming such of them as require it; and in the third place, in planting them in that Situation and Disposition which is proper, and they require, the better to flourish and enlarge, and for the Continuance of those that are to hold long.

And fourthly, in giving some of them the Assistance they have need of, whether in tightening the Mould about the Roots, seasonable watering, tying, or wrapping up, earthing, or other ways covering, that in their Season they may bring Profit and Delight, and so compensate your Cost and Labour to your own Content and Satisfaction.

CH A P. VI.

A Supplement to the Flower-Garden, in many rare Curiosities, omitted in the foregoing Part, relating to curious Flowers, and their well ordering.

How Flowers alter for the best.

THOUGH the Garden of Pleasure, or Flower Garden has been spoken of as well as others, in the precedent Part of this useful Work; yet, since this Addition is properly but a *Supplement*

ment of what is wanting, I shall proceed, in my Method, to somewhat that is yet Useful and Curious, that has hitherto been omitted, or not sufficiently touched on, for the Satisfaction of the Reader, or such as intend to practice in the Art of Gardning, either for Profit or Pleasure.

To Improve Flowers in Beauty and Efficacy, requires Knowledge, and therefore, if you would choose from single Flowers such as you would have double, that is, of those Flowers as are proper to be so by Nature, or the help of Art, then seek such single Flowers, as differ from those of the same Kind in number of Leaves, and in Shape and Colour; preserve the Seed of them, and it will answer your Expectation. These Seeds will produce Flowers, much differing from the ordinary Flowers, though all were produced of one Seed but a few Years before.

Nay, a particular among many others of one Plant, will bring more double ones, that are not qualified as it is; and this ought especially to be known to all such as undertake to raise Flowers; as for Example: If you find a Stockgillflower that hath Five, Six, or more Leaves, the Seeds of that will produce more double ones than those that bring forth but Four Leaves, Quantity for Quantity of Seed, Twenty for One.

This Flower, I must confess, shews it more than any other, for having no Thrum in the middle, as many others have, Nature has given this a Token to inform us, that those that have a Leaf or Leaves added to it more than its usual Kind, will produce those with many Leaves, and produce a fine double Flower, which when it hath attained to, it is then come to the Bounds of Nature; it never after beareth Seed, but by endeavouring, blows till it dies.

This Rule may be observed by other Flowers that are destitute of a Thrum in the middle of them, as Auricula's, Wall-Flowers, Campions, Primroses, &c. and in these, finding a Leaf or Two more than your ordinary Number, you may conclude Nature is consenting to their own Improvement, if Art, her Handmaid, be assisting to perfect her work begun.

The Flowers also that bear Seed, when double, as the Gillsflower, African, &c. so the Seed of such double Flowers, they will bring you more and better Flowers, a Hundred to One, than the single ones; and you will find several Varieties in sowing the Seed of them, but most tintured with the proper Colour of the Mother-Plant; and some of these will run as it were beyond the Limits

Limits of Nature, and then they will either have Pods in the middle, or break, and so never more bear Seed. *July* Flowers have likewise their Sign, distinguishing which will bear Seed, and which will not. Those that will do the best of these, if the Weather hinder not, or break them, have their Horns in the middle of the Flower; and it is further to be noted, in marking of the Flowers, that the Seed of those that are striped, shall bring the most strip'd ones, and some of different Colours and Stripes, their Seed all alike.

More curious, though but brief Observations, in sowing and sowing Flowers, that they may best improve.

In sowing curious Flower-Seed there is great Care to be taken, lest Insects, under, or on the Surface, destroy it, and bereave you of your Expectation; and therefore I advise to sow a little Flower of Brimstone with such Seeds as are small and choice Seeds, mixing them together with fine sifted rich Mould, before you sow it, that it may have an equal Distribution, and not be blown away, or crowded to one Place more than another by the Wind, e'er you can cover it. With a Rake, which must be done gently, you may, if the Ground be moist, mix with the Flower some fine Wood-Asnes, and these will keep off the Insects, and Birds, and impregnate the Earth with a warmth to produce more kindly what it is intrusted withal; and when you have raised them fit to transplant, consider the Agreeableness of the Nature of the Ground, whether you carry them to that wherein they were produc'd. Let it be rather richer, to make them take root, and nourish them; but let it, however, be as near as you can of a true Proportion to the other Soil; and above all things avoid to place such things as delight in high dry Ground, in that which is wet and low Ground, for that is inconsistent with the Nature of it; and so on the contrary, such things as naturally delight in marshy, fenny, or boggy Ground, must not be placed in firm Ground. Now some may demand how they should have Bogs in Gardens to place them in. To this I answer, They may be artificially made to serve the turn, as well as natural ones, in some Corner, or the best Place to spare of your Garden, for the Improvement of the Aromatick Reed, and Flag-bearing Flowers, which are the only Flowers valuable in a Garden that require them; and in this manner you may make it, and it will continue long with a little Supply.

Dig a square Trench, about Four Foot deep, and as long and broad as you think convenient; and if the Ground be not Clay, or stiff, you must have Clay brought, and well trodden, with Water to make it pliable. Lay it a Foot thick in the bottom of the Trench, and likewise lay it on the Sides and End, with a Spade, as in casting up Banks in ditching: This done, fill up the Place with a moorish black Mould, though somewhat fat, mixed with Slime out of Ponds or Lakes; then with Water make it into a kind of a Bog, or Quagmire, and when it is well settled, and begins to dry on the top, you may plant such things as are proper to grow in such wet Places, and may be Ornamental to a Garden; for if you have nothing but superfluous things to place in it, it is not worth making.

A more curious Way than hitherto generally practised, for Laying Layers.

In this Undertaking observe the Propriety of the Season you are to make your Laying in, and to cut and slit what you so intend.

If your Layers are liginous or woody, just where you bend to lay it, run the Layer through with an Awl, but of no great bigness, as it is done by Circumposition, that is, the Mould is bored up to the Boughs, which is to be taken off; and this must be done in Spring, before the Sap rises, in February, or the beginning of March; and you must Water them but slenderly till the Drought comes, but then you must do it every Day, or they will not encrease their Roots if they have already taken them, that is, every Morning and Evening, for, for want of this exact watering in the hot Season, they will make no exact Roots, if any, but rather a Knob or Botton full of fresh Sap, upon the Tongue of the cut in the Branch laid down; yet these cut off, and well minded in watering, will often grow, but not near so kindly as they would, had they taken regular Roots in the laying, whilst they were fed by the Sap of the Plant.

All sorts of Flowers of tender Stalks, proper to be laid, do not lay the Earth too much on them, but so much as may give Nourishment and Juice to extract a Root in due time, when the Layer shall be taken off; and water these as the former, and consider, they take Roots according to their Substance or Quality, and so in growing they will not pine, but flourish very much in a little time; and if your Stock prove thin, by this means you may encrease it; so that *Flora* will smile in every Corner of your Garden.

A De.

A Description of exotic Flowers, and the Methods they blow in.

There are several scarce Flowers, not long introduced, and so new and rare to most Gardeners, that I presume some know them not; therefore, for their Advantage, and that of private Gardens, I shall call them from among the numerous sorts of Flowers, giving a Description of 'em as briefly as I can, so that they may be known to all.

Agot-Halter is a curious beautiful Flower, it is of three fine setting-off Colours, pale green, rich scarlet, and pure white; most times well parted, striped, and agoted, never running the bottom, and *Tamis* blue; it blows in *April*, or the beginning of *May*.

Dianæa, of a pure white whipt about the middle, feathered with a deep brown purple, the *Tamis* dark blue; it blows in *May*.

Gladiolus Bizantius, it flowers of deep red, with two white spots within the mouth of every Flower, round, flat rooted, and neted over, blows in *June*.

Lichnis Calcedonica, is a double Flower, of a rich scarlet colour; this flowers in *June*.

Ficus Indica: This Flower, called the Indian Fig, consists of Leaves springing out one on another from one Leaf put half in-to the Earth, which taking root, puts out others; these Leaves are flat, and round pointed, a finger thick, of a pale green colour; and out of these in *June* comes a Flower set with two rows of pale yellow Leaves, a yellow thum in the middle, not with red; and when the Flowers side, the head they stand on grow in the form of a Fig, but in this Country they ripen not.

Periploca Virginiana: This Flower rises from one or more stalks about a foot high, and at several joints is set with two long broad veins, round pointed green leaves, and when grown up, out of the top of the stalk, from a skiny hole, a great tuft of Flowers come forth 30 or 40, hanging down on long foot stalks, each consisting of five hollow leaves of a purplish colour, which shedding, produce long crooked cods, which when ripe produce a kind of Silk. This flowers in *July*.

Cyclamen appears in *August* with small naked stalks, the flowers coming up folded in the leaves, hanging down their heads, and turning up their leaves again, which are five in number, some of a bright shining reddish purple, others of different, and of these there are divers sorts and colours, some flowering in the Spring, mostly white.

Mirabilia Peruviana: This Flower hath a big stalk, bunched at the joints, spreading into many branches, set at the joints with fair green leaves, between which and the stalks come forth the flowers on short foot stalks, in *August*, narrow at the bottoms, and wide open at the brims, red and white, and of other colours; for there are divers sorts of them.

Ormichogalum Ethiopium: This Star-flower of *Ethiopia* has green leaves a foot long and an inch broad, woody when broken, and the stalk an inch high, bearing from the middle to the top many large white Star-like Flowers, in *August*, with marks of yellow at the bottom. There are several sorts of them differing in colour, but not in shape.

And thus much as a taste of choice Flowers, not before described in this Book.

Many curious Secrets in laying Flowers, not before made so Plain or Easy.

In this case, the chief thing to produce fair and gallant Flowers, and many Layers, is the Soil wherein they must be planted, which must be neither too stiff nor over-light; the best course is to provide a quantity of good fresh Earth, such as the Mole casts out of good Ground, not too stiff nor over-sandy, to make it too loose, such as has lain long untill'd, take it four or five inches deep under the Sword, or good Mole-hills, but beware of Ant-hills; mix this with a third part of Ox, Cow, or Sheeps Dung, that hath been long digested, intermixing a little Lime: Lay the heap high and round, that it take not too much weat, often turn and stir it, that it may well digest, and put it in Pots or Beds for planting Layers in, and your Suckers in Flowers will be the more prosperous: taking off your Layers, either in *September* or *March*, cut off all dead leaves, and the top of all that are too long; then take them up, and Earth about the roots, and so set them in your Pots, filled with the before-mentioned prepared Earth; set them in the Shade, and with gentle watering they will grow; so by degrees remove them into the Sun, in the morning, but let them not stand whilst it grows too hot; never water them too much, for that will make them grow faint and sickish; moisten them with Pond or River-Water, or if you cannot, but have it from a Pump, or cold Spring, let it stand three or four days in a Vessel to take off the chill, lest it hinder their growth: In Winter, till *April*, water in the morning, lest the moisture freezing about the roots of

the tender Flowers, kill them; but when the Sun grows violent in the evening, when the Sun is off them, lest it be too hot, and they get little benefit by them, and so they are lost in the roots. This is an excellent way to take another kind of way of earthing, which I have found to be a rare Experiment, known but to a very few.

Take rotten Tallow that is the Reliques or Rubbish of Tapers, that is long lying is converted into Earth; lay this on a heap three months to sweeten, for in its nature else it is too fowre; to one barrowfull of it put four barrowfulls of good rotten wood-pile Earth, and the Rubbish of old foamy Walls, finely sifted: Mix them well together, and let them lie a fortnight ere you put them into your Pots for your *July* Flower-Layers and other Layers to be transplanted in.

When your Flowers begin to spindle, nip off all but one or two at the most of the biggest, at each root, leaving them only to bear Flowers; and when they come to bud, for flowering, nip off all those too, but three or four that are best placed; and by this means the Flowers will be much the fairer, and more Layers gained, by which your kinds are continued and encreased. Forget not often to tie up the Spindles, as they grow in height to small Rods, and set them by on purpose for their supporting, lest by their bending down they break off.

From the middle of *June* to the middle of *July*, is the prime time for laying *July* Flowers; which is thus performed, the newest way and safest:

Make choice of those slips that are short, being supplied with sufficient joints for laying; prune off the end and side of the top leaves; cut the undermost part of the middlemost joint half through, from thence slit the stalk through the middlemost joint upwards to the next joint, open the Earth to receive it, so gently bend it therein, keeping up the head of the slip to let the slit better open; then press down the Earth on it, and immediately water it, and in the dry Season often repeat it, and the roots will take the better and sooner; so that in the beginning of *September* they may be cut or removed into Pots or Beds made of the aloesaid prepared Earth; but shelter them from great Rains, lest the roots rot with too much moisture.

Some choose *July* Flowers shoot up but with one stem or stalk, without any Layer, which is a bad sign; for if it flowers in

such call the Root Line; the other, before it flows, and is the Spindle, that is, the Spindle of the Root, and the Root of the Root.

If your Root produces the same Layer, it is good; but if it produces too much Nourishment drawn from the Root, it is bad; the Flowers will be all of one Kind, and will produce little worth.

In these Plants also, if you perceive any to have the Pod open it with a fine Pen, and make a Division thereof, and bind it about with a Goldbeater's Skin, or Gut, which being wetted with Milk on it neatly, that it will hardly be discerned. Many come all of one Colour, the Layers, from the Stem, will be continuing, and be one Kind.

If you would preserve good Seed for the recruit of your Stock, keep the Seed in the Pods as long as may be for the Danger of Frosts; keep them dry, and cut the Stems off with the Pods on them; dry them so as not to loose the Seed; the driness and blackness of the Pods, denote the ripeness of the Seed. Choose for the largest and best Flowers, the Seed at the bottom of the Pod. The Seeds producing most Variation, are striped Tawneys; and most Variety of double Flowers are raised from the Seed of double Flowers, though, for want of them, double Flowers may be procured from the Seeds of single ones.

*To prevent Grass-plats in Gardens free from Weeds, and har-
boring Insects to destroy the Flowers, &c.*

Grass-plats are ornamental in Flower Gardens, and therefore, beside mowing and keeping them even, there is another Care to be taken of them. The Scapulae of the Grass, after the Eye is drained from them, lay them in the Sun drying, and then beat them final; lift them in the beginning of March, on your Grass-plats, and they will nourish the Grass with kindly help, and make it spring speed; but as for Weeds, it is so bitter an Enemy to them, that not any will grow where the Rain has cast it into the Earth; and for Insects, they fly the Scent of it; for such as remain are sure to die. You may sprinkle it likewise in your Alleys, and the Sides of the Borders, to prevent Worms or Snails from biting the tender Flowers, or Plants springing up, or hindering their growth, by poisoning the Stem, lurking under the lower Leaves, or on any such like occasion, pruning the under superfluous Leaves, that fruitlessly draw away the Nourishment from

from the Root, and blowing in the dust, many times rot, to the
 destruction of the Seed.

BOOK VII.

Of the manner of sowing Seeds, and of the manner of raising them to a very few.

Burn a little of the Earth, and mix it
 well with Water, and lay it in the Sun, that
 springs out of the Earth, and then for several
 times in the Sun, it appears like a fat Mould; Earth;
 then sprinkle it again, and if you will produce a Salad in
 Winter, have a long Tin, or Iron-Plate, as long as long,
 place it in far from the Ground that you can let Fire under it;
 spread the Moulded Earth about an Inch and a half thick upon
 it; sprinkle it with warm Rain Water, and the moisture that it
 sues from a fat Dung-hill; rake it fine, and having steeped Pur-
 slain or Lettice-Seed Six Hours in warm Water, mixed with the
 dregs of Oyl, and some of the moisture coming out of a Dung-
 hill, sow them, by sprinkling them on the Surface of the Earth
 prepared; and strew, lightly, Earth of the same moulding,
 mixed with other fine Mould, over them, so that it may but just
 hide them; and let the heat underneath, applied to the Tin-
 Plate, produce that heat to the Earth as a July Sun would do,
 and the Seed will immediately sprout up, and bear Leaves in the
 time mentioned, or less, fit to be gathered, and presented at the
 Table; if this be required in the heat of Summer, a Bed made
 of this Earth, and the Seed so ordered, will produce the same
 effect. And thus you may make Flowers blow out of Season.

To produce Roses in any Season.

To produce this effect in Winter, wash the Root of the
 Rose Tree, and sift very fine rotten Horse-dung, mixed with
 Powder of Sulphur, upon it, and so cover it over with good light
 Earth, and the Tree will blow at its usual Seasons, to Admiration;
 and by this means the Trees set in a Pot or Case in your Green-
 House, will produce Roses in the depth of Winter.

To make Tulips, and other Flowers, of the Colour you are
 pleased to have them.

This is done by steeping the Seeds in such a Colour as you desire
 the Flowers to be of, changed from its proper Nature, viz. for
 Black.

Black, Ink, Green, Verdigrise, Blue, Azure, or a fine Violet Colour; Red, raised Bricks, in Water; Yellow, Turmeric; Purple, Indigo; and Iron scales; and when the Seeds have sufficiently taken the Tincture, the Flowers will appear, thus in being a little Warm, to make the best use of them, is to put in proper Grounds, for the Seeds will produce the same as the Flowers.

If you would have the Flowers white, with a little Red on the Tree, then bring the seeds to the Flame, so that the Flame findgates, when the seeds are put in, that the ends will be white, for the Flames of Tobacco do the same, when it changes the Tip of the Leaves to a Purple Colour.

If any Flower be of a Purple Colour, as Tulips, Hyacinths, Crocus, &c.; and if you would make them with Scarlet, dip a fine Hair Pencil in the Spirit of Viciol; and striking the Leaves, they will, where so ever you turn to a delicate Scarlet, to the Admiration of the ignorant, in this Secret, who will wonder to see them, almost in the turning of a Hand, so changed from the Colour they just before presented.

How to produce double Gilleflowers of any Seed sower.

Take a Bean and hollow it; put into it the Seed of a single Gilleflower, and stopping the Hole with a little soft Wax, set it in proper Ground, and a Gilleflower will spring out of it, and be double and large.

To make Gilleflowers of an extraordinary bigness.

To do this effectually, make a laying of Dung and fine sifted Mould, sprinkle it over with Bean flower, then make another laying of Dung and fine Mould, and lay down the seeds, then sprinkle that over with Bean flower, and so gently when you have sowed your Seed upon it, and the Produce will be wonderful; the Flowers will be exceeding large, and hold within the circle of their hanks or pods, without bursting or cracking; and most large Flowers of this kind do.

To make a Vine produce Grapes of diverse Colours.

Make a hole in the Vine, that it may pierce to the heart, fill it with the Colour you desire, and plug it up, covering the Plug over with soft Wax to prevent the Vine's bleeding in that place when the sap arises; and for that year, at least, the Grapes will take wholly or partly the tincture of the Colour you so put in.

To

To make a Peach Tree bear with Waxing on the Fruit.

Take the Stone of a good bearing Peach, bury it in suitable ground till the stone be half open, to take out the Kernel gently, without breaking it, and write on it with Vermilion made liquid in the bearn white of an Egg, and with a Pen write what you please on the kernel; then put the kernel the right way into the shell, and close it with a little soft Wax, as may just stick it together, and set it; and when it produces a Tree bearing Fruit, the Words in allusion of greater measure will appear on the Peaches.

To make Sets by Art, a rare Secret.

Tho' Nature produces Sets without the Help or Industry of Man, yet a good Gardener ought not to be wanting in finding out such ways as may further or better Nature's Work to his own Praise and Advantage; and this may be done by bearing the roots of Plants that are of woody substance, and then make a cut in the same fashion with that which is made in Layings, not towards but fromwards the Plant, and into this cleft put a small stone, or something that will make the root gape, so that the part cut stands upwards; so cover over the root with light Mould three inches, and the lip that was so lifted up, will in its time sprout into branches, being nourished by the root of the old Tree; and when grown, cut off this Plant with its root to live for its self, and if it so happen that you can have an eye on the lip of your root, which you after incision lift up, then the branches will more certainly and speedily issue out of the root so cut. This is termed, in the Gardener's Language, Starting a Root.

If a bulbous root be wanting of Off sets, it is a held Opinion, That raising it lightly with your nail, cut it upon the bottom in the crown of the root, whence the fibres spring, and sprinkle some dry Dust upon it as a healer to the Wound, and as many Wounds (though not too many, lest you weaken the main root) as you make, into so many Off sets shall the genital Virtue dispose it self: And by this means may you supply your self, and in a few years stock your Garden with choice Rarities, without being at extraordinary Charge or Labour in seeking them; when others, who are ignorant of this Art, shall only wonder and stand amazed how you came so well furnished or stored, unless you discover the Secret to them, and so consequently make them as wise as your self.

To

To preserve *Ros* from Smelling after it is clipped.

This sort of Grass, as it makes pretty Figures in a Garden, being drawn into knots, so it is offensive to choice Flowers and Plants that are near it, especially when it is clipped, and a time after; nay, upon clipping, it offends, with the strong Scent it casts, those that will be near it. To remedy it, take this as a Secret: Put some good Lime-stones in fair Water, such as will not dissolve, yet give the Water a taste and tincture, and after they have stood in it three or four hours, water it with this Water, and the scent and offensiveness will be taken away from it.

To preserve Gravel or Shell'd Walls from being turned up, or made unsightly by Worms, Snails, and other Insects.

When you have levelled the Ground, lay a laying of Gravel four inches thick, raking it in the middle, that the sides sloping may shoot off the Rain, and your Graft or Flower-Borders may rise decently on either side, and when it is well gone over with the Rower five or six times, leave it to a Shower of Rain to soak and settle; and when the Sun has again dried it, take dirty or waste Salt, either Bay or White, as you can get it, and sow it pretty thick, about a quarter of an inch deep, on the surface of the Gravel; then rowl it over, that it be pressed in, and evened in every place; then sift fine Gravel over it, about two inches thick, rowl it as before, and when it is evened, you may cover it with fine Shells, if you have them, and rowl them as the other; and the Salt remaining, or dissolving, will so tincture the Earth, that no offensive Insects can live in it. If Salt be dear, or scarce to be had, get Slack'd-lime, and sift it very fine, taking all the stones out of it, and order it as the salt, which will effect the same, but not so well nor lasting.

C H A P. VIII.

How to place and order your Conservatory or Green-House, and the choice Plants and Flowers that are to be kept therein, to preserve them from nipping Winds and Frosts, till the proper Season of bringing them abroad again.

THE Art and Diligence of the Gardener is, and may properly call it, but the Handmaid to Nature, the Mistress of Production; yet good Skill here much assists and improves the Work, preserves

preserves tender Plants, Shrubs, and Flowers from the Hurts of Inclement Airs, especially such as are brought out of hot Countries into the Northern Region, and are not naturally produced here; for which Reason, having already given a large Account of many useful Things and Matters, conducing to instruct the Gardner in his curious Art, I now come in the Close to give other Instructions desired to be known by many, but yet rarely found to the purpose; and that is the framing and ordering the Green House to preserve choice Plants in, against the Extremity of the Season, that will otherwise infallibly kill them on a sudden, or make them pine away by degrees; for such tender Greens as last all the Year, are not to be kept without much Care, sometimes they must be aired abroad, and at others kept close in the Green House or Conservatory; and therefore every choice Garden ought to have such a House in the manner following:

This House must be of a Timber frame, plaistered within and without, three times as long as broad, that the Pots and Boxes wherein your choice Flowers and Plants are, may be placed in rows, a little distance from each other, lest they incumber and prejudice one another, strew the Floor with dry Rushes, let the length be from East to West, and have South Windows of Sashes, with close shutters, that when the South Sun is warm, even in Winter, you may open them a little to let in the comfortable Beams and fresh Air, which greatly cherish all Vegetives; but in the bitter Season keep them close, stopping the least crack with dry Moss. Let the House be low, under the Wind, that it shake not when Storms blow, to loosen the Roots of the Plants which in the cold Season are feeble, and the Fibres loosened much, endanger their growth. As for the Door, let it be double, that is, a porch Door and an inward Door, that one may be shut whilst the other is opened.

Many keep Stoves within their Green Houses, and Subterranean stifling Fires, that with their sulteriness, and the gross Vapours occasioned thereby, cause a sensible languishing in tender Plants, which, if not remedied by the sudden letting in the free Air, will kill or blast them; and then if it be in the Extremity of Winter, in cold nipping Frosts, or bleak Winds, it is not proper to be done, for such extream cold Air coming to them on a sudden, chills them too much, and endangers them on the other side; so that as before they expressed a languor or drooping, now you will perceive the Leaves shrivel up, and sometimes the whole

Leaf dry away, but consequently the edges will grow whitish, and pallid Spots appear on the rest, and this fails not, in such cases, to Orange and Limon-Trees. Therefore, since all Green-Houses do require artificial Heat to preserve the Plants in Extremity of Weather, take my safe Advice herein: To administer to it kindly, to nourish and keep lively what you intrust your House withal, lay aside all Pans of Charcoal, Stoves in the House, and such stifling suffocating things, and build a Stove at the West end of the House, without doors, with a Chimney, or Funnel, a Hearth, and Ash-hole, convenient, and close sheltered from the Wind by Boards or other shelter, impailing it both from that and the Rain, and Snow, that falls cold in the Winter Season; then have small earthen Pipes, made hard to endure the Fire, place the larger end of three of these in the Hearth, or Fireplace, and let the smaller ends pass through the Wall into the Green-House, so that when the Fire is well lighted, and glows hot, being shut up close the Heat, or purest part of it, without Smoak, may be carried through these Pipes into the Green-House, which will gently diffuse it self all over the Place, and expel Mists and Damps; and when you think it sufficiently warmed, then by a small Pipe passing through the Wall at the East end, let in the Air, but not too much; then plug up the out-holes of the Pipes, with Stopples of the same Materials; and this Mixture will let you see your Plants wonderfully flourish, when others that have not this means applied to them will be under a sensible Decay; and this use twice or thrice a Week, or oftner, if the Weather be very extream, will cost less Fuel than Stoves within, and be abundantly more serviceable; for that the Smoak and Sulphur of the Fire, in this case, which is hurtful, flies away, and has no effect on the Plant to leave a Scurf or Dust on the Leaves, which sicken them, and render them subject to a Decay, making them also unsightly by a footy cloudy colour, when they are brought abroad in due time to be aired and flourish, or give a sightly Prospect in the Garden.

If the House stands in a cold Place, mat it within side; and this much avails to keep off the Vapours that would otherways arise from the giving or sweating of the plaister'd Walls; and if fine sifted Sawdust, or Seacoal-Ashes, were strewed on the Floor, three inches thick, and covered with the dry Rushes I mentioned, it would be so much the better, to prevent the moist Damps arising out of the Earth, which the Heat will otherwise exhale, and

and this many times commixing with the Cold, mildews the Leaves; and as you find occasion for greater or lesser Heat, so you may open one, two, or three of the Heat-pipes at a time, and keep the Air-pipe stopped, when the Wind is at East or North-East, very violent Cold.

When you enter, move the Leaves and Branches a little with your hand, and fan off the Dust, but shake not, nor loosen the Roots, and never forget to shut one Door after you, ere you have opened the other, unless in the Spring, or the Day be very warm, lest the cold Air, too much mingling with the Warmth, extinguish it, or cause the Air to putrifie.

As for the opening the Window-Shutters in a Sun shiny Day, when the Wind is still, let it be no longer than from Eleven to Two, from the end of *October* to the beginning of *March*, for no longer has the Sun a sensible Warmth in this Climate, between those Months; and unless you find the Weather open, only draw up the Shutters, but do not draw up the Glass Sashes; and when in the Spring you begin to draw up the Sashes, do it by degrees, a little one Day and more another, which use the Plants to Degrees of Air; so that coming abroad, after their long Confinement, they may be the better able to brook it, surrounding them on every side, for too sudden Alterations are prejudicial.

You may, if you will be at the Charge of it, hang your Green-House with Bays, or some coarse Woollen, and it will render it the warmer; and observe never to let the Ceiling be too high, for then it will not reflect the Heat kindly, but in ascending, it will lose the Vigour it should bestow on the Plants; and I approve it rather to be thatched with a thick Coat of Wheat-Straw, or fine Reeds, that will keep out all wet, than to be Tyled or Slated; for though in a Nobleman or Gentleman's Garden it is not so sightly, yet it abundantly more keeps out the cold Air that beats down upon it; but be sure take particular Care that no noisom Insects lurk in this House, to infest the Plants with their Bites, or venomous Spume, and if you perceive any such marks, smoak it with Frankincense and Storax, or other perfuming and strong-scented Drugs, and it will kill or drive them away; but do it not too much, nor too often.

CHAP. IX.

Of ordering your choice Plants and Flowers in the Conservatory, to make them flourish, as Oranges, Limons, Aloes, &c. And the Season to remove them; with more particular Observations in the Stove or Fire-place.

HAVING thus far traced this matter, I come now to give some other Directions that a skillful Gardener ought to know and put in practice.

In the Season of Housing, trouble not any of your Plants with much Water; water them as little as possible, and some not at all, as Aloes, which require no more moist Nourishment than the Air gives them, and the Earth they are set in, neither within nor without doors, for Water makes them sickly and die away; and this is the Reason the unskilful cannot propagate them, but that they fail under their hands; for when they perceive the Dust in their Pots or Cases dry, they conclude they want Water, when indeed they would be well without, and the watering the destruction of them, unless a little, when the Season is very hot, and the Sun too much dries up the moisture of the Air; and even then it is better to set them in a refreshing Shade near some pleasant Water, than to pour Water to the Roots.

When you water others, as Oranges, Limons, Myrtle, &c. the want of which is shewn by the much curling of their Leaves at the edges or points; if it be in the cold Season, make the Water Blood warm, and steep a little Hens dung and Pigeons-dung in it; so strain it out by Inclination, and pour it softly on, a little at a time, about two inches from the Stem or Bole, that it may soak in leisurely, and spread through all the Earth to the Roots. If they have too much Water, it will be known by their Leaves turning pale; then open the holes at the bottom, that the moisture may effuse, and sift a little fine Mould on the top, raising it higher about the Bole, and be careful to take off such Leaves as are withered or corrupted, lest they infect the rest that are near them with the like Disaster; and if you conceive this proceeds from the Root's not well spreading, you may move the Bole or Stalk; which loosening the Earth a little, will give it better way, and feel with a small Stick, or your Finger, whether any Stones or Sticks be casually put into the Mould, to hinder the fibrous or bulbous Roots from taking effect; if so, remove

remove them and fill up the space with fresh black Mould ; and by this means the Roots will prevail to an encrease, and draw in Nourishment so as to supply the Stem, and consequently the Branches ; and every Week, at farthest, with a fine Iron Comb, or hand Rake, go over the Surface of the Mould in the Pots and Cases, but not deep, and be sure to free them from Grass or Weeds, if any such thing infest them.

I would advise you not to set your Pots, Boxes, or Cases, in which your choice Plants are, as some do, too close, lest the Mists and Damps arising, seize and sicken them, but set Forms or Stools regular, and place them in decent order, that they may not only give a comely Prospect, but the Heat and Air freely pass between them, placing the tenderest nearest to the Pipes that admit the Heat, and the most hardy towards the Pipe at the other end which conveys in the Air. Above all things, keep them from interfering with one another, by running in or intangling ; for many of them thus nourished with kindly Heat and pleasant Air, will grow even in the Winter, little or much ; nay, you will perceive some to blossom, others produce Fruits : And by thus ordering, many choice Flowers will blow in the depth of the cold Season. So that here by Art a Natural Spring is imitated, or rather effectually produced ; and by this means curious Flowers are produced at *Christmas*, in a hard Winter, to the Admiration of the Ignorant, who cannot dive into the ways by which they are raised, and caused to blow so unseasonable, to what Nature in her common course produces ; which Art makes a Gardener much in esteem, whether it be for his own proper Advantage, or he does it to satisfy the Curiosity of others whom he serves.

Now some may object, I have spoken of a Fire stove, that is the Life of the Green House, for nourishing the Plants with kindly Heat in the rigid Season, and have not told the Materials proper to make it of ; therefore to satisfy them more fully, a word or two of this, though somewhat by way of Digression, as not falling in due order.

This Stove I would have made of Stone, two foot and a half high, four-square, a foot and a half each square, much like that used by the Chymists of our Age in their Laboratories ; the Stone must be such as will endure a Heat very fierce, without scaling, cracking, flawing, &c. and if Stone cannot be well gotten, fine close moulded Bricks may indifferently serve, layed with well-tempered.

tempered Mortar, of such a thickness that the Heat may not penetrate through them, topped like a Baker's Oven, and the Hearth with a Grate for the Ashes to fall through into, the Ash-hole smooth and even, the Door the Fuel is put in at but very narrow, the Fuel Old Coal or Charcoal, which must be tended, during the giving the Heat, with fresh Supplies, and the Door of Iron, kept as close as may be, and a Plate of Iron or a fixed Door of the same Metal on the Ash-hole, the Funnel that evaporates small as a Lead Pipe; it may be made of an Earthen Pipe that will endure the Fire, or the top of it Tin, so that as little Heat may go out as may possibly be hindered, and no more Air come in than will keep the Fire in its vigour. But to cut short here, this is a Workman's Business, and cannot so well be described in Words, as to be taken by Pattern, or the Experience of a Mason or Bricklayer; to do which however, these Directions will give a true Insight to the Matter.

CHAPTER X.

Of Degrees of Cold, and what Greens or Choice Flowers best endure them, and what are too tender for some of them, and must be timely housed.

The least enduring Plants.

THose that endure the least Degree of Cold, are such as are the Produce naturally of hot Countries, and are brought hither as Rarities, as *Aegyptica Lavendula*, *Pomum-Ethiop* the Great, *Indian-Fig*, *Capsum-Indicum*, *Spinosum*, *Phascol*, *Chemela-Tricoccus*, *Arabian Ornithagalon*, the *Syrian Marums*, *Styrax*, *Coultea-Ordonata*, *Balsamum*, *Heliehriso*, *Amaranthus*, *Asphaltus*, and some others; and these must be early taken care of when abroad, and not brought out too soon. About *Bartholomew-tide*, when Morning-Frosts or Cold Dews fall, cover them with bafe Mats, or warm Straw, Morning and Evening, uncovering them in the Heat of the Day for 8 or 9 Hours, or from 9 in the Morning till an Hour before Sun set; and let them not remain longer out of the Conservatory or Green-House than the beginning of *September*.

Plants and Flowers bearing the next Degree of Cold.

Cijitius, *Vernal*, *Cyclamen*, *Alexandrian*, *Lawrel*, *Laventine*, *Myrtle*, *Aloes*, *Lentiscus*, *Canna-Indica*, *Orange-Trees*, *Citron-Trees*, *Oleanders*, *Jacobæa-Marina*, *Digitalis-Hyspan*, *Geranium-Triste*, *Chema*, *Leo*, *Alphestris*, *Virginian-Jessamine*, the choicest

choicest Carnations, Abrotanum, the Japan Reed, Hedisarium, Clypeatum, and some few others. These must be covered by the beginning of *September*, and housed about the middle of the Month, if cold Rains fall, or Frosts happen, more than usual, if open Weather at the end of it.

Of Plants and Flowers that best endure extreame Cold.

Mountain-Fretillaria, Agnus-Castus, Cherry Lawrels, Artoserferis, Althæ, Frutax, Tithimal, Aconitæ-verum, Matricaria, Spanish-Genista, Jacca, Syfinelchium, Bulbous-Iris, Pomgranates, Eastern-Jacynths, Arabian-Feseli, Ethiopian-Veronica, double-white Lychnis, Persian-Jessamine, Ceneraria, and some others, of which these are the choicest, and most worthy to be preserved. They endure Cold to a great degree; but if they stand abroad, and are not well covered, in the extreame Frosts they will die; therefore it is not Prudence to trust them out of your Green-House or Conservatory no longer than when you perceive the Frost harden the Ground a little, and Ice remains beyond the Sun's Power to melt in the Day time.

CHAP. XI.

Prognosticks, or Observations by the Moon, and other Celestial Bodies, when the proper Times are to Sow, Set, Plant, Prune, &c.

THE Ancients observed, in all Undertakings of this nature, the Moon's Motion, and Position of the other Planets; and though it is not at present much regarded by such as use the Art of Gardning, yet I am of Opinion that it will not be amiss to set down brief Directions of this kind, for such as will experience them, and no doubt it may be with Success.

In the first place then: Prune your Vines, the Moon being in the Full, posited to Sagittary, Scorpio, Leo, or Taurus; it is held that neither Bird nor Insect will infest your Grapes, nor will they be subject to wither or decline.

Secondly, Graft not in the Moon's Waning, or when she is not visible.

Thirdly, Sow or plant when the Moon is in Taurus, Scorpio, or Vingo, in good Aspect of Saturn.

Fourthly, When the Moon is in Libra or Scorpio, dress your Garden, and prune small Trees and Shrubs, and they will prosper much the better.

Fifthly,

Fifthly, When the Moon is above the Earth, in the First Quarter, and if it may be joined to Venus or Jupiter, cut such Trees as you would have quickly grow again.

Sixthly, When the Moon is in Cancer, set and sow all sorts of Pulse.

Seventhly, Neither sow, plant, nor graft, or meddle with any thing relating to Gardning, when the Sun or Moon is eclipsed, or on that Day, nor when the Moon is affected by either of the unfortunate Planets, viz. Mars or Saturn.

Eighthly, When the Moon is in the encrease, sow, set, or do such things as you would have of a speedy growth, and flourish well.

Ninthly, Sowing Seed in expectation of double Flowers, observe to time the sowing in the Full of the Moon; and when it is come up, and fit to remove, do this also in the Full of the Moon, and continue so to do as often as you transplant.

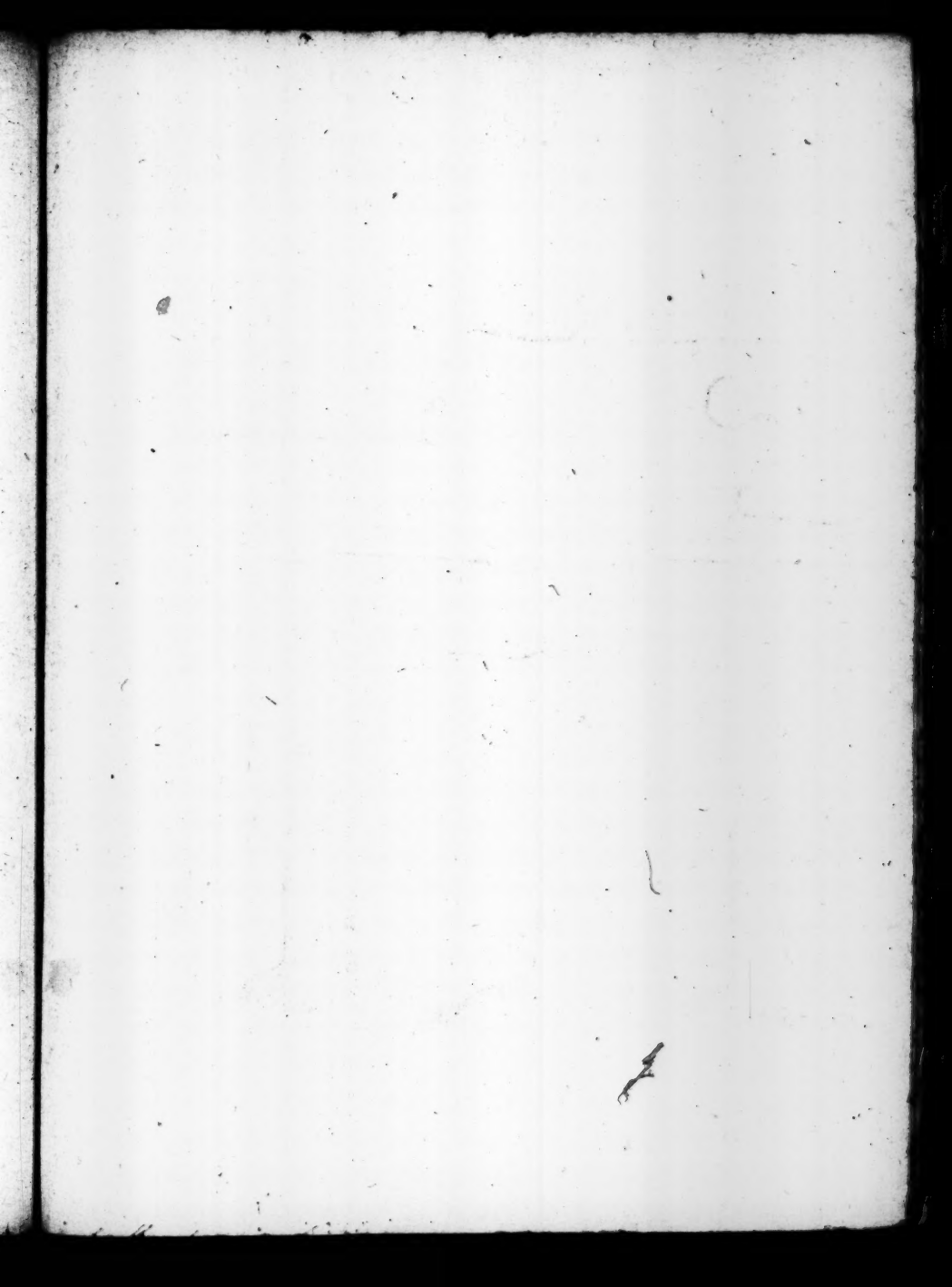
Tenthly, If you are desirous to have low, shrub, dwarf Trees or Plants, then it is held proper to cut, set, or plant in the Wain of the Moon.

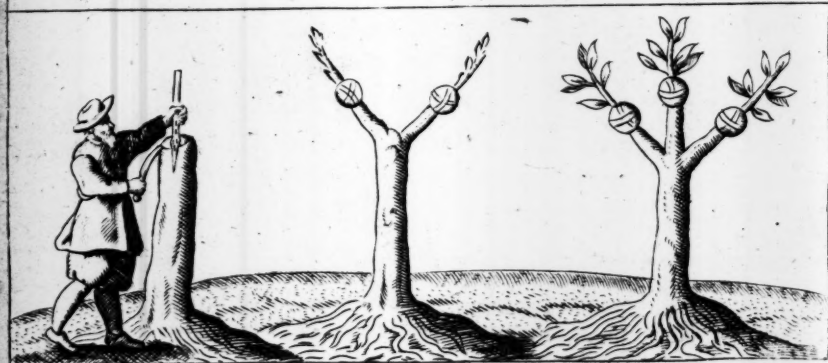
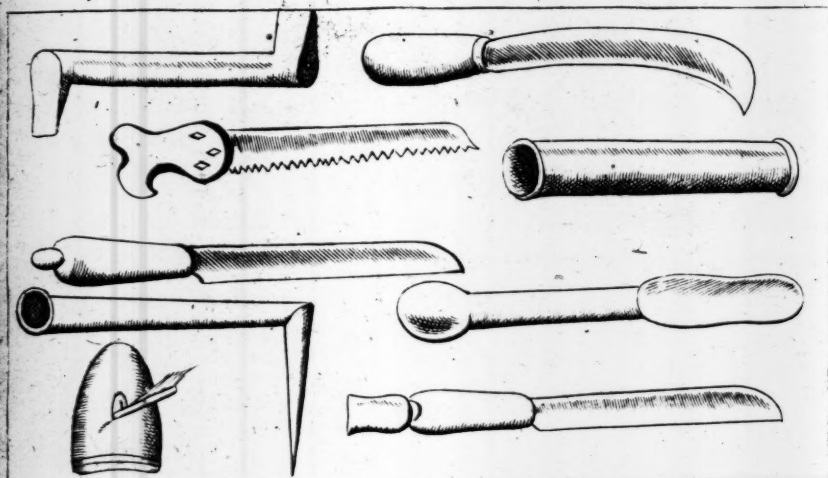
And these Rules are held as universal by Astrologers, and such expert Gardners as affirm their own Experience in the Observation and Practice of them.

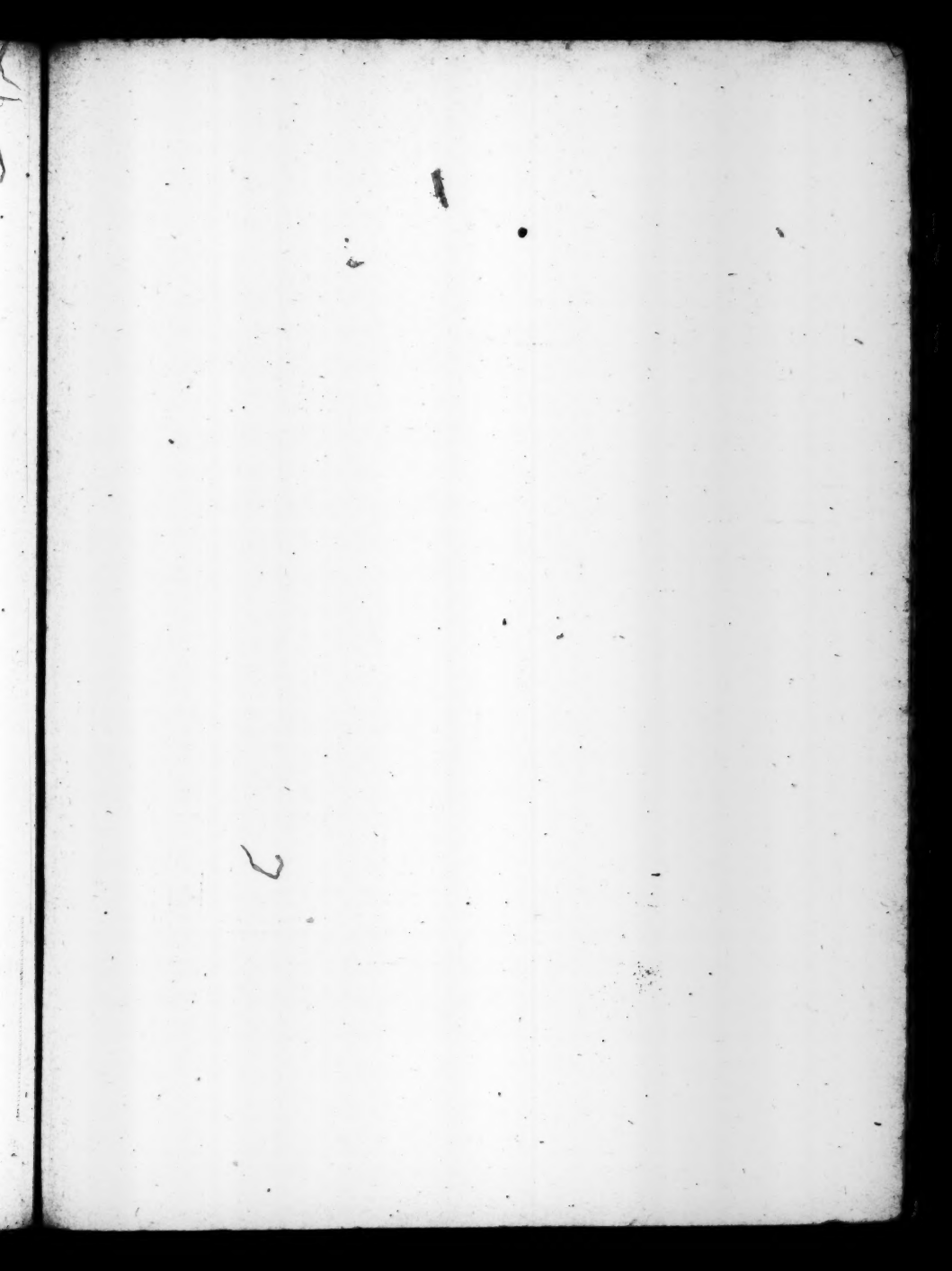
Choice Observations in watering young Trees, Herbs, Flowers, Seeds, &c. to Preserve and Encrease them.

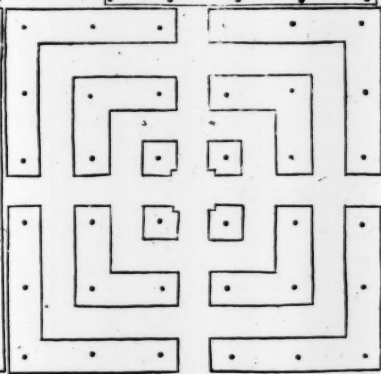
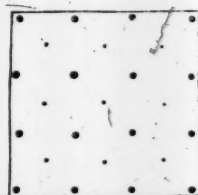
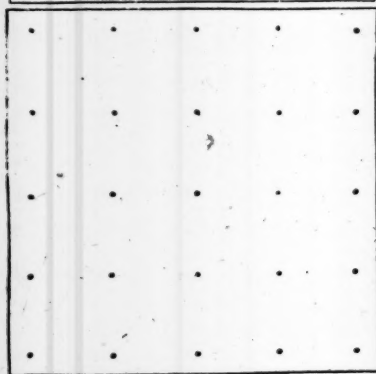
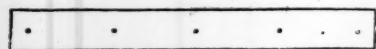
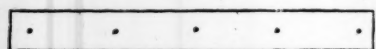
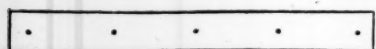
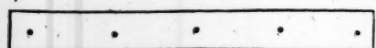
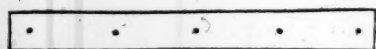
Some make great ado with often watering and sprinkling, when indeed once well done, would save them a great deal of Labour, and make the Plants thrive the better: When you find watering necessary, which you may perceive by putting your Finger into the Ground, and there be a driness; then pour Water gently, but at a distance from the Root, unless small things, that it may leisurely soak, and spreading in the Earth, approach the Roots by degrees: And this done well in the Evening, unless in a very hot Season, will be sufficient for 24 Hours, and in cool Airs 44 Hours. Water not in the Morning, unless the Drought of the Day be extream, making the Trees or Plants languish by the Sun's exhaling too much moisture; for if the Ground be heated when wet, it scalds the Roots of tender Plants, and makes them languish by degrees, if not die presently.

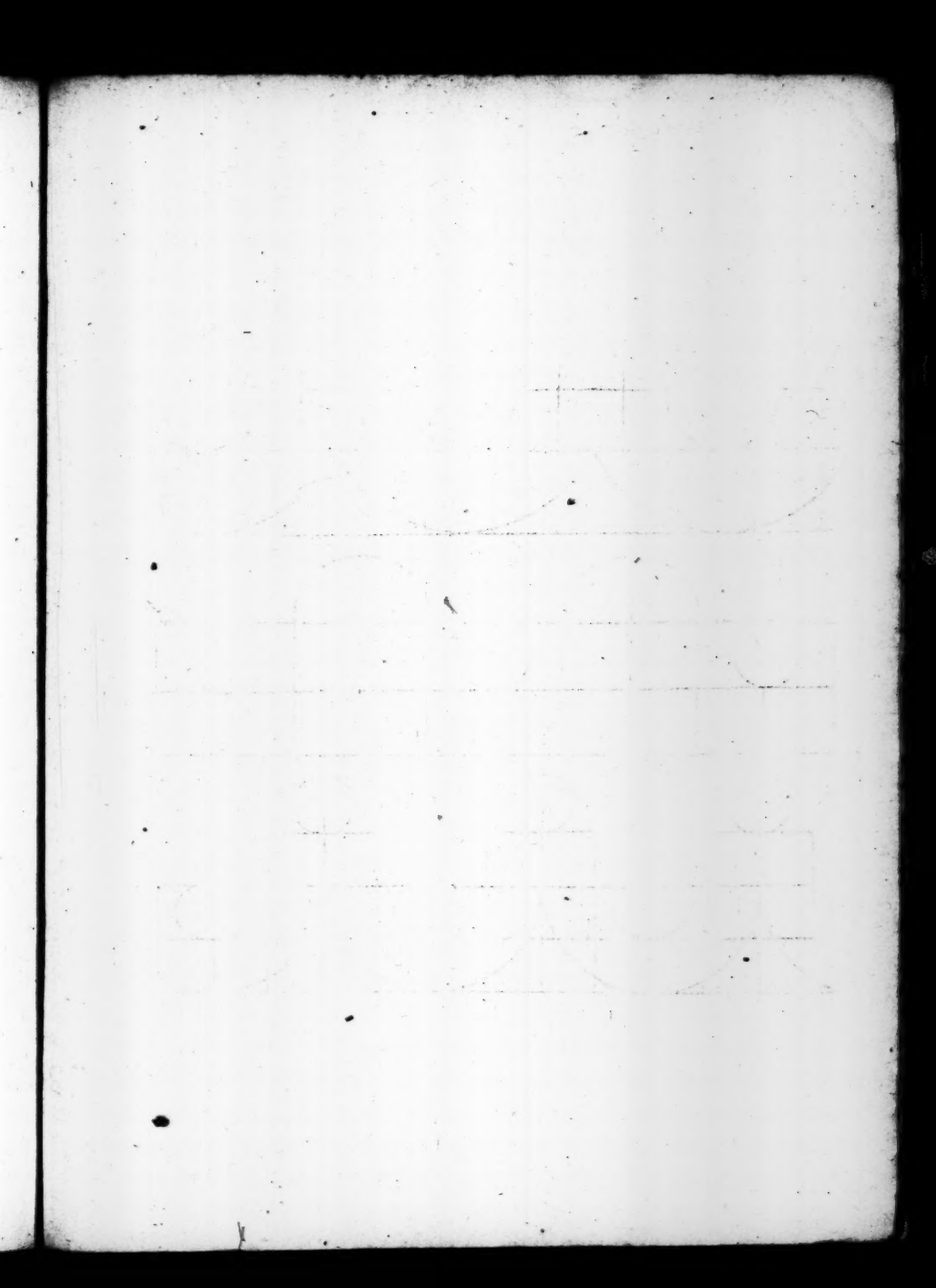
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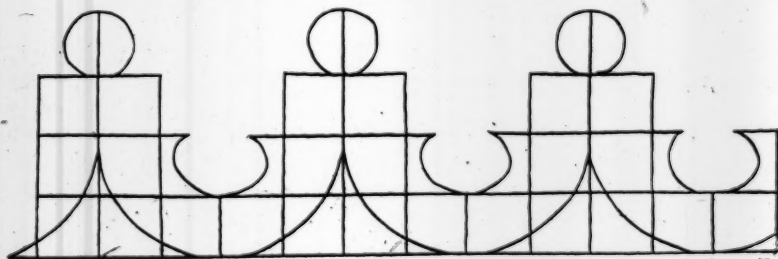
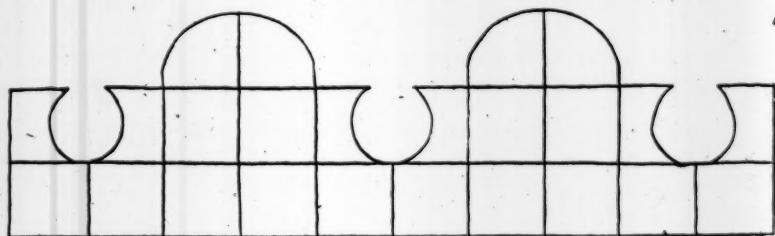
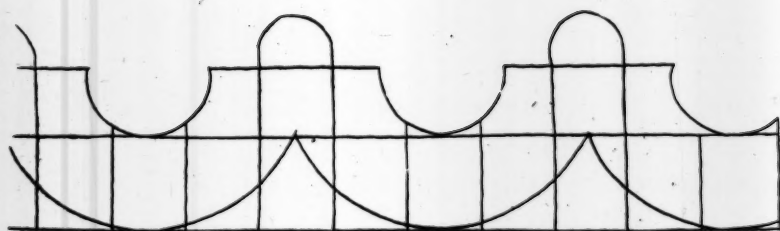


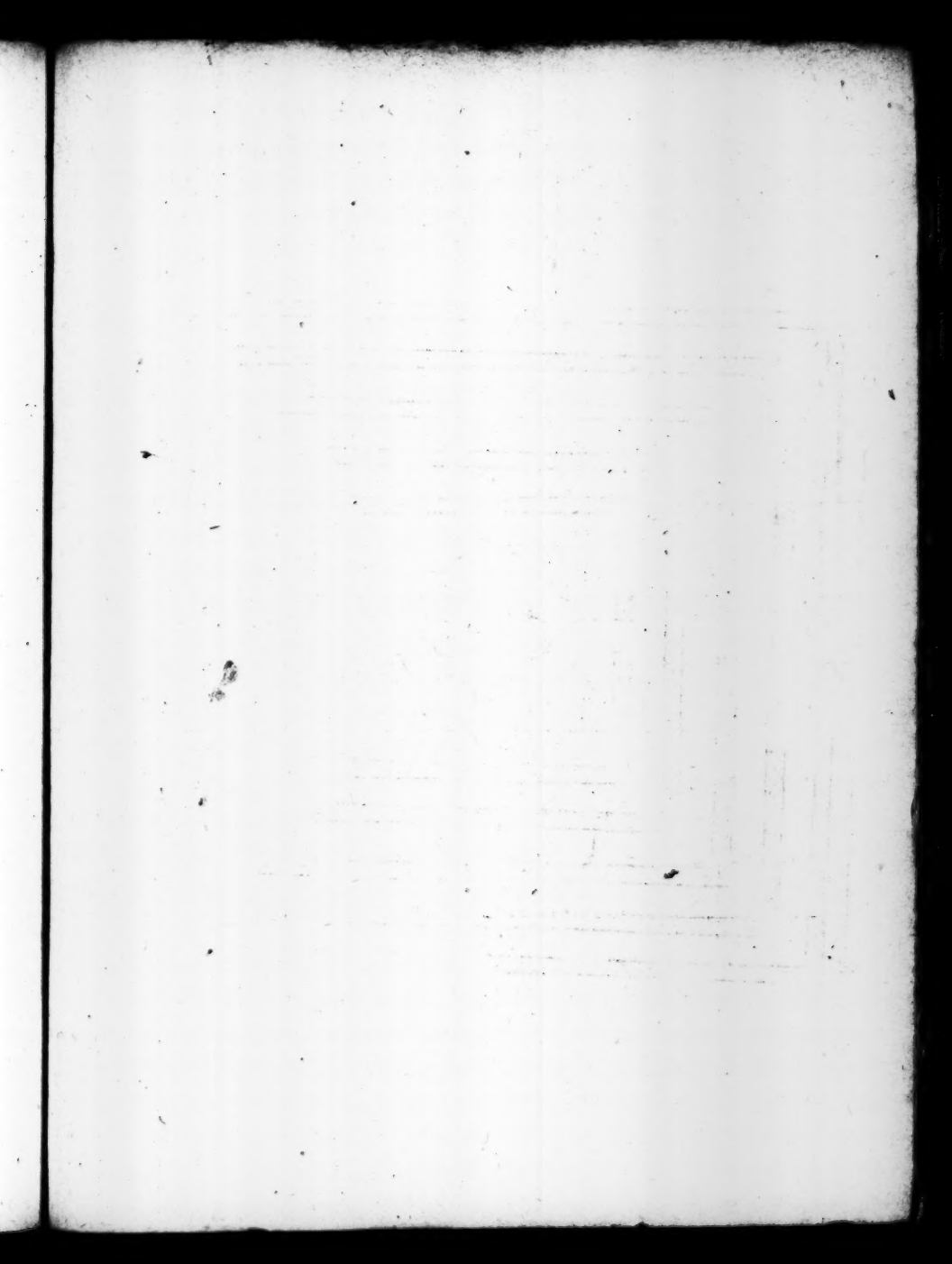


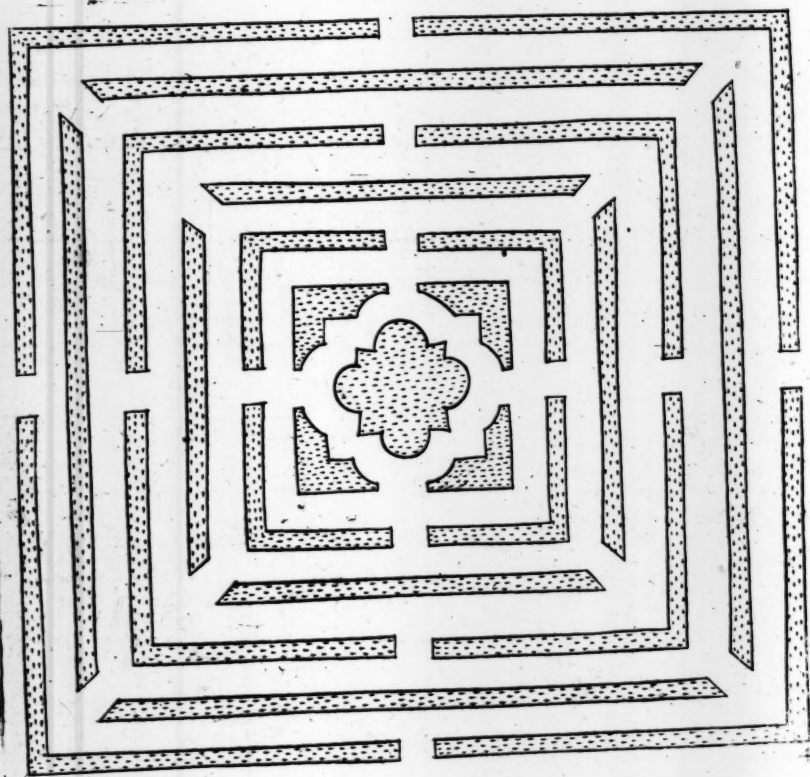


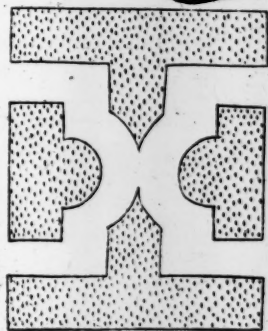
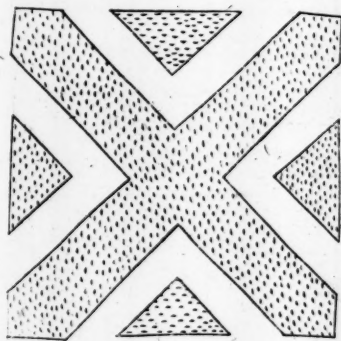
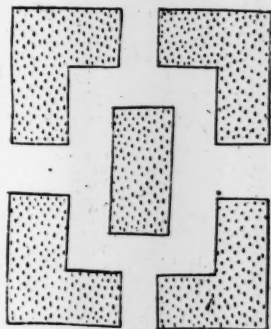
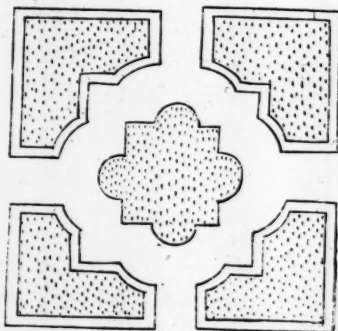
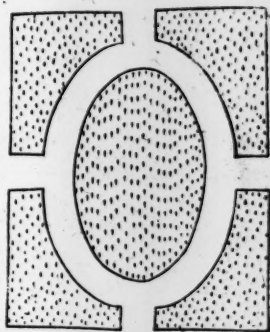
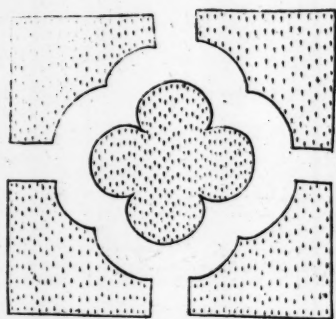




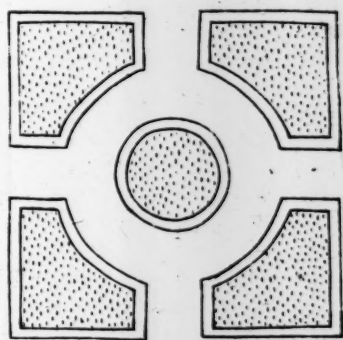
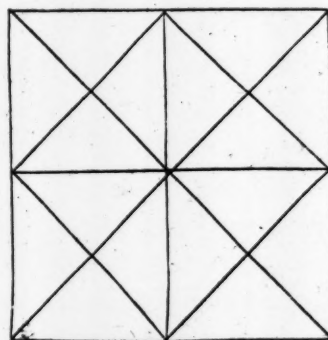
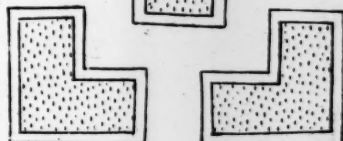
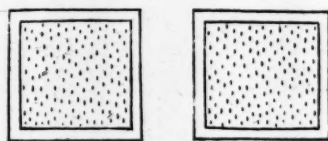
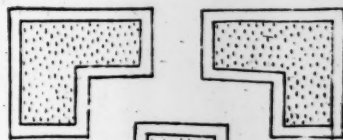
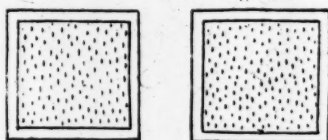
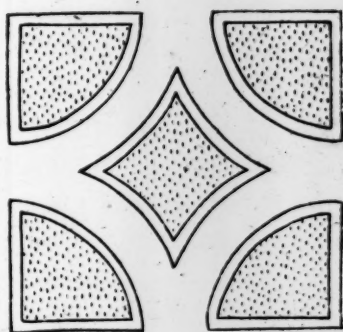
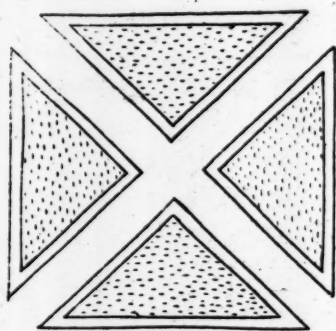


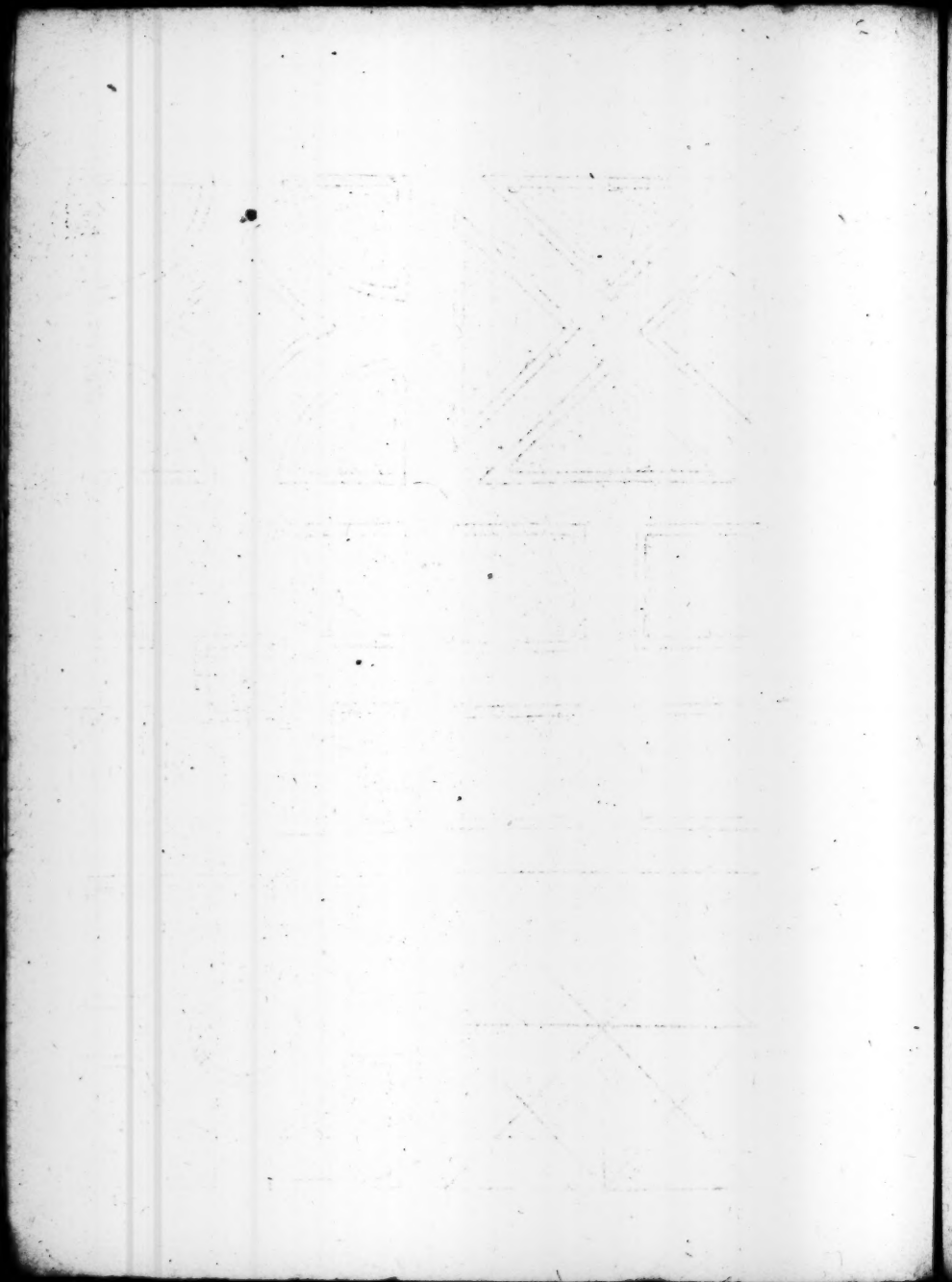


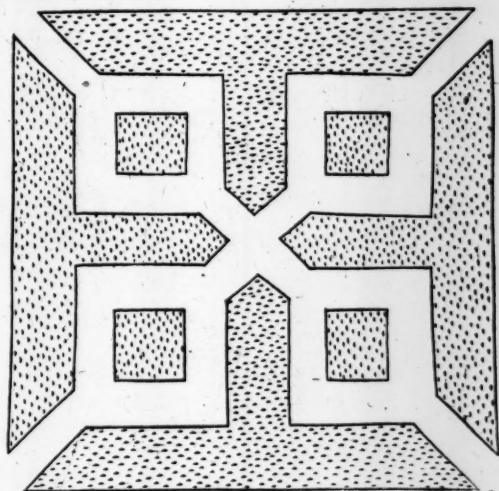
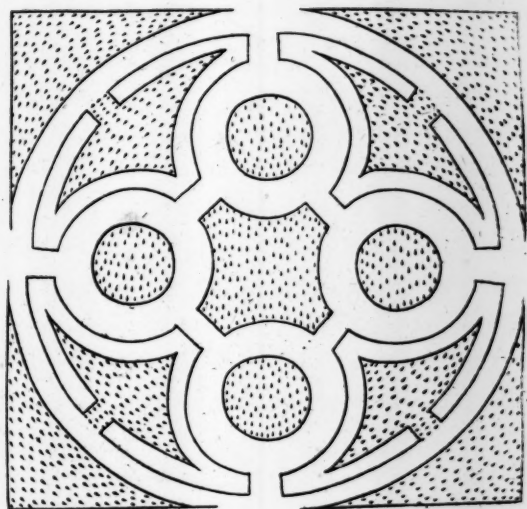




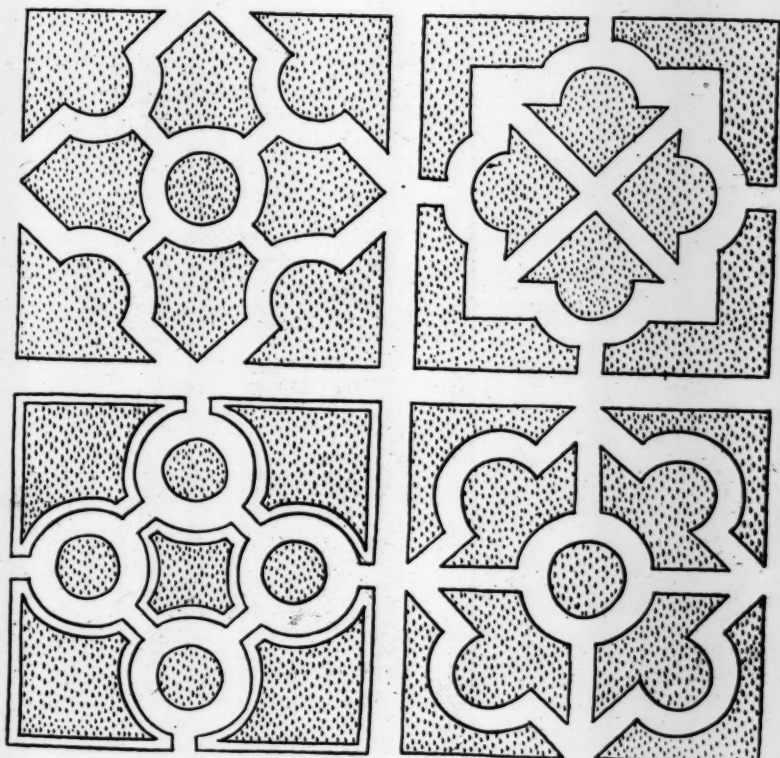








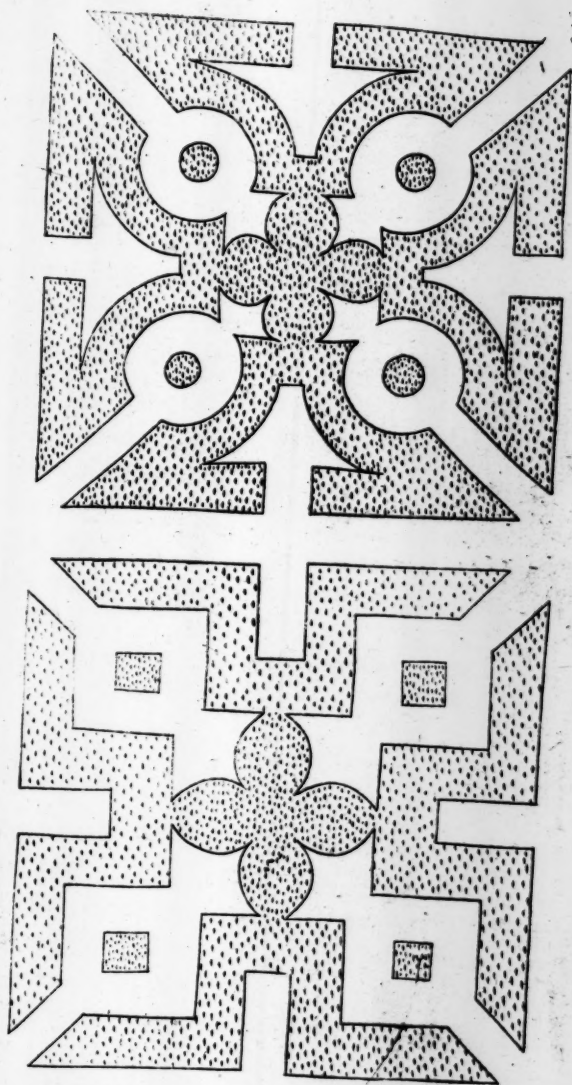




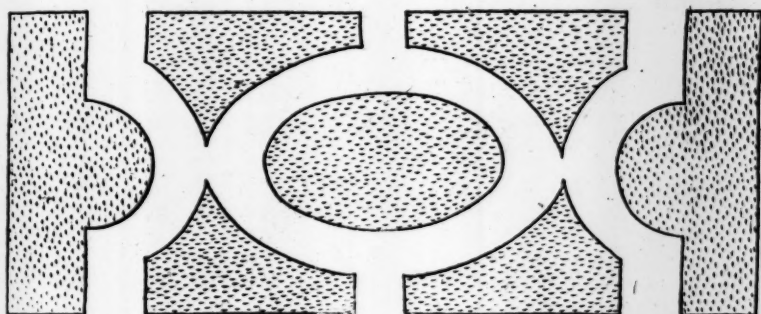
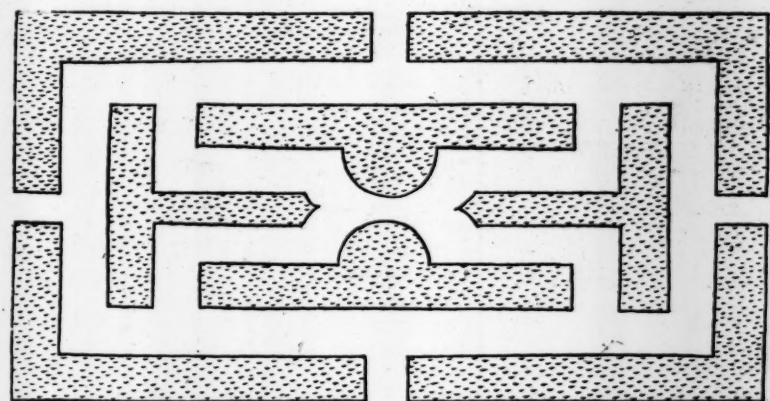
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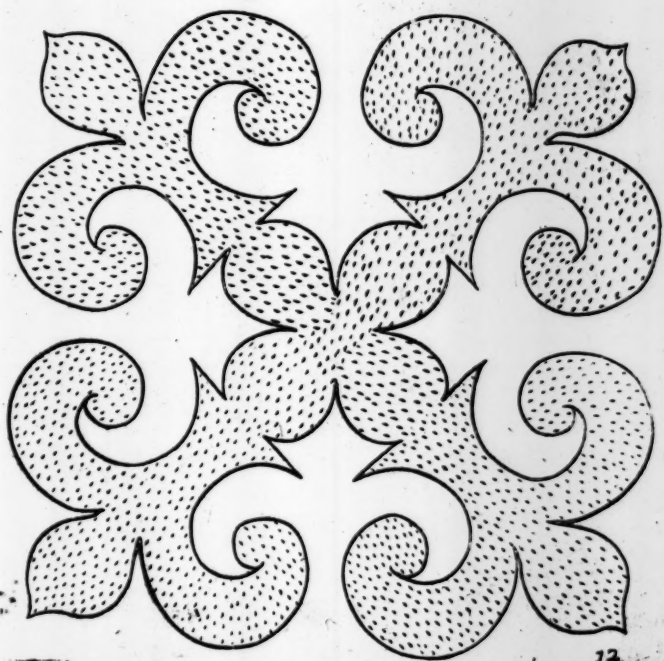
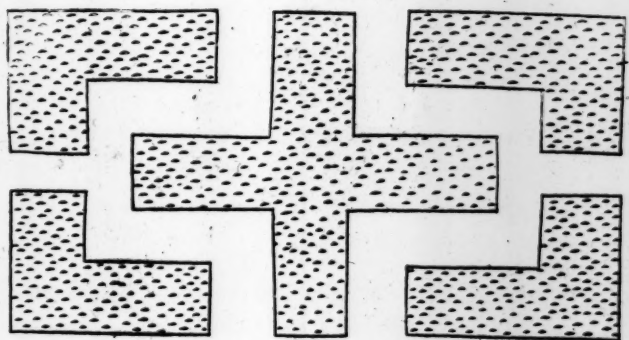




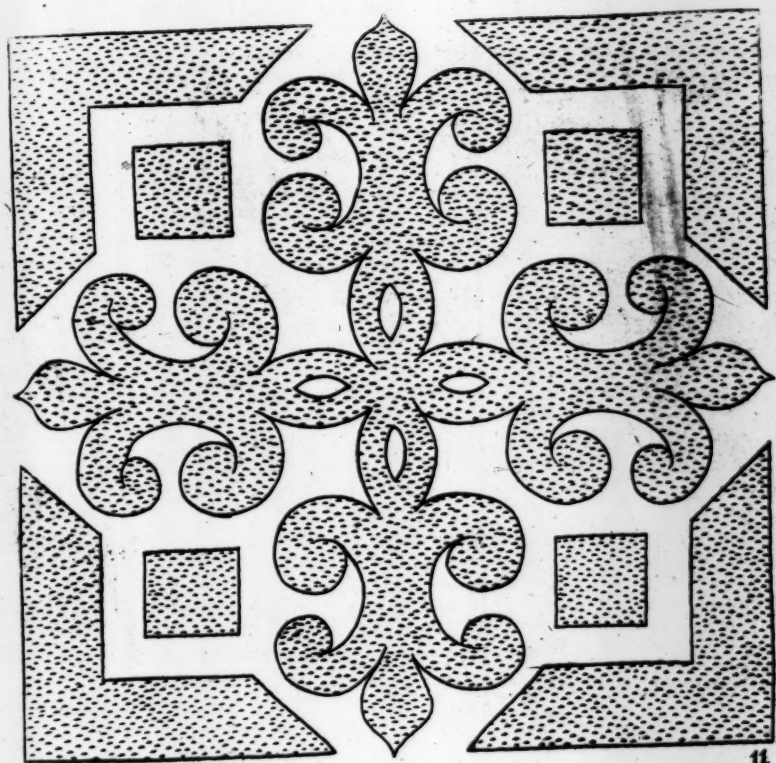


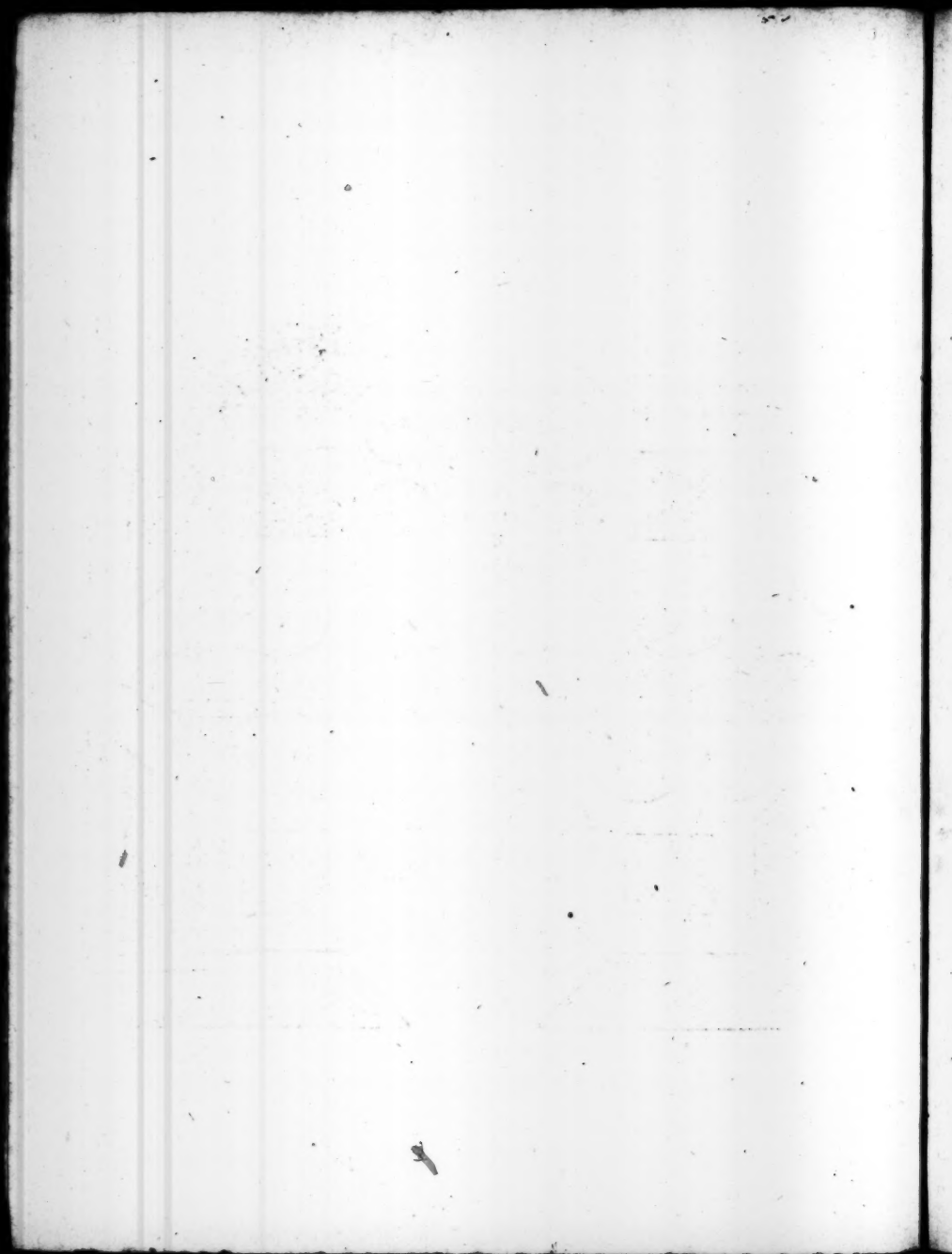


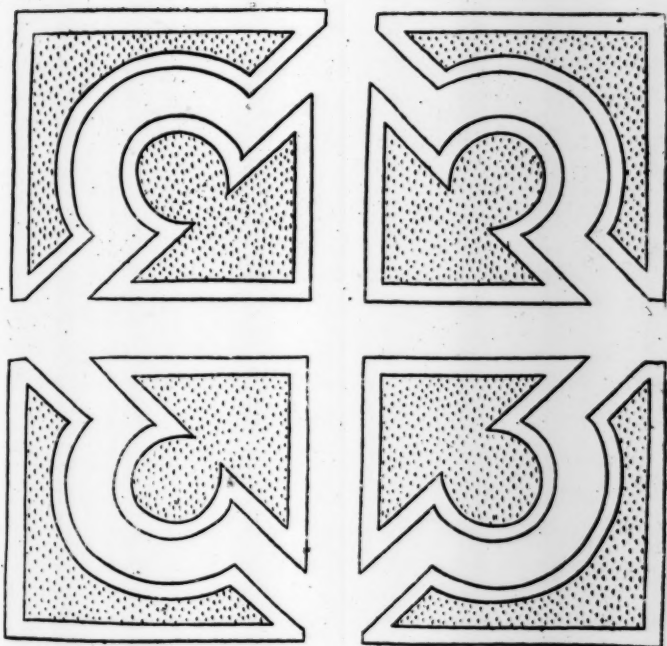




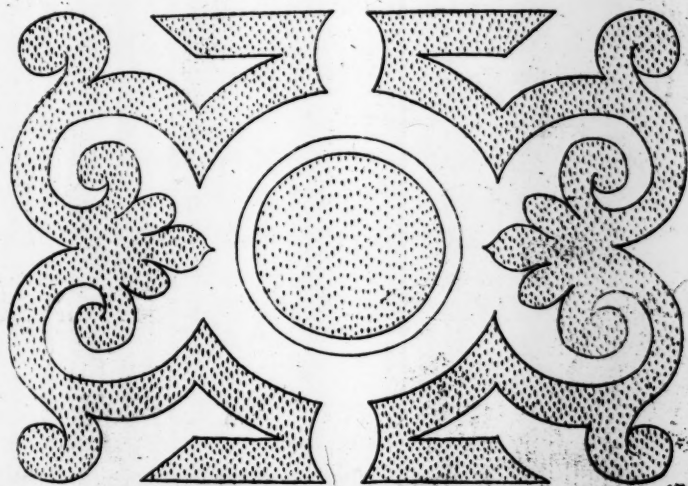
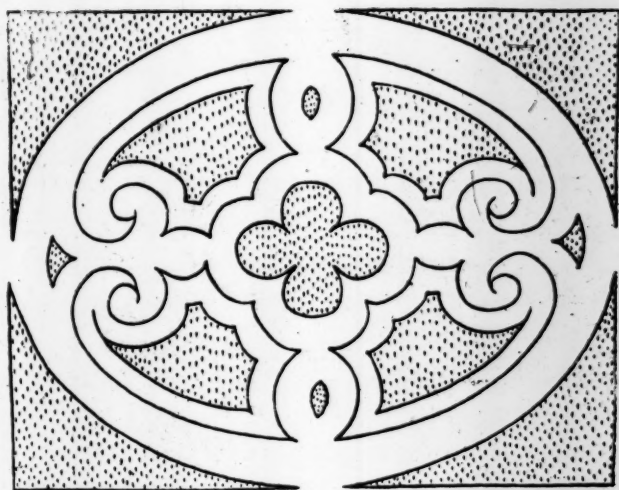




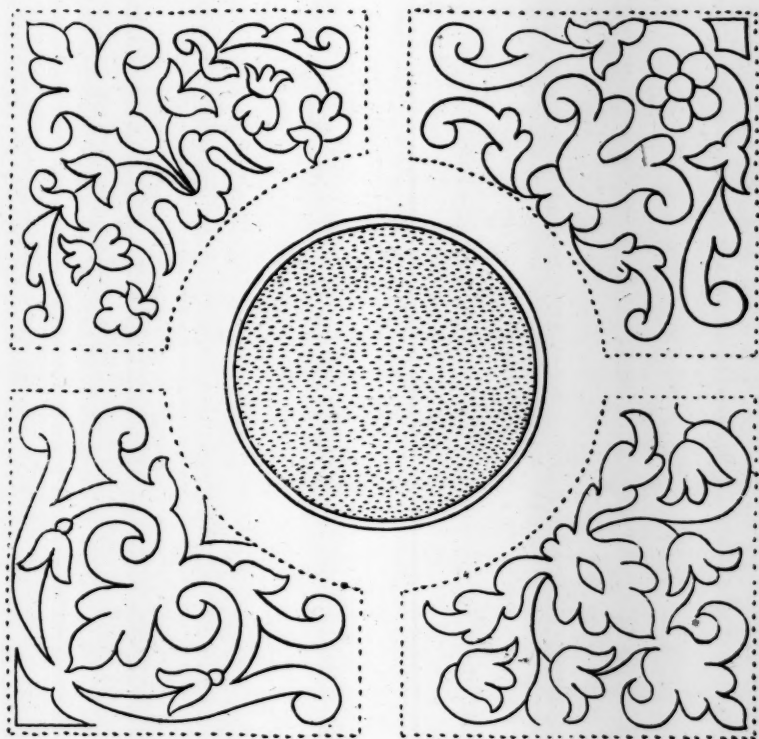




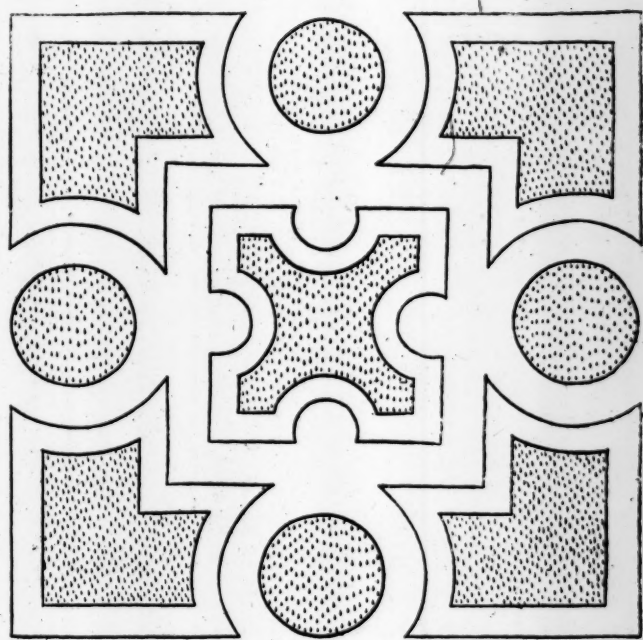




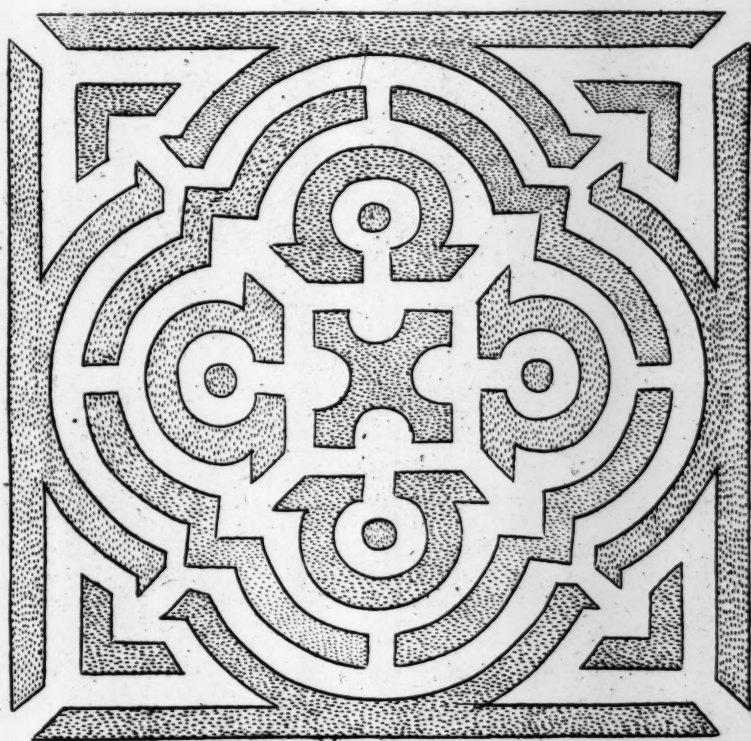






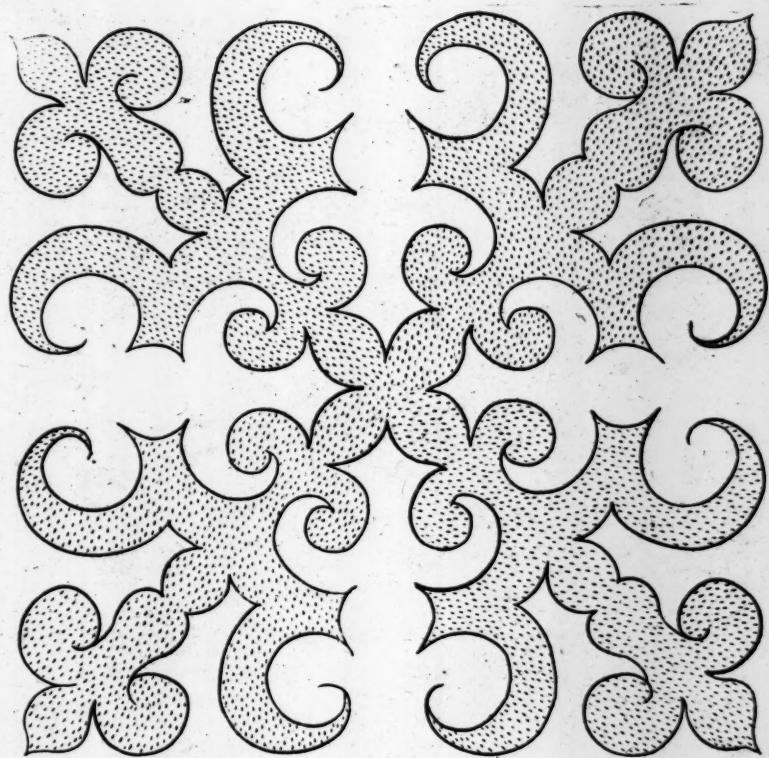




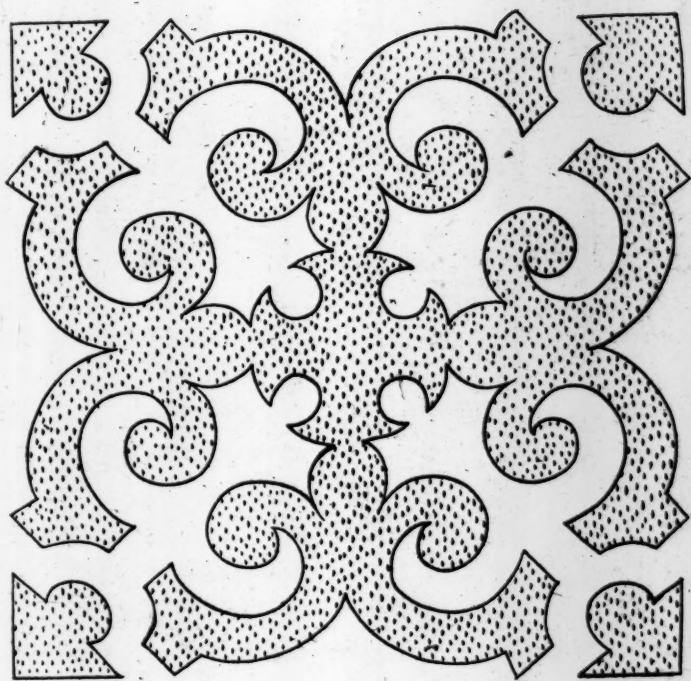


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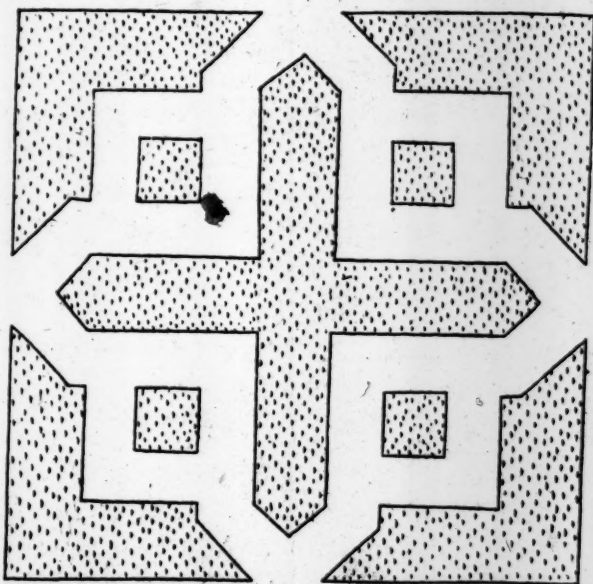
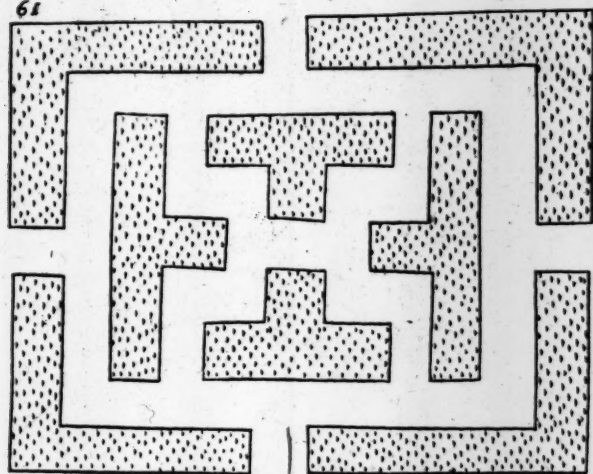




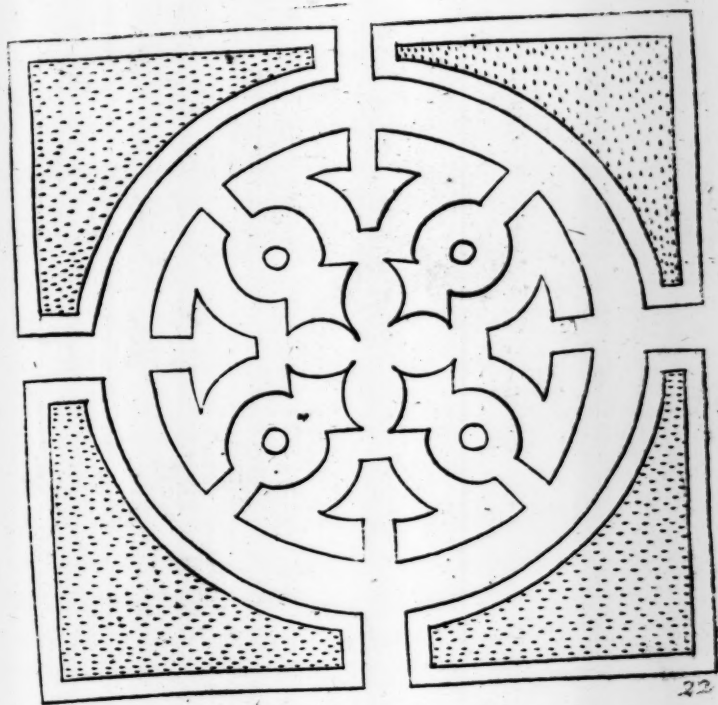


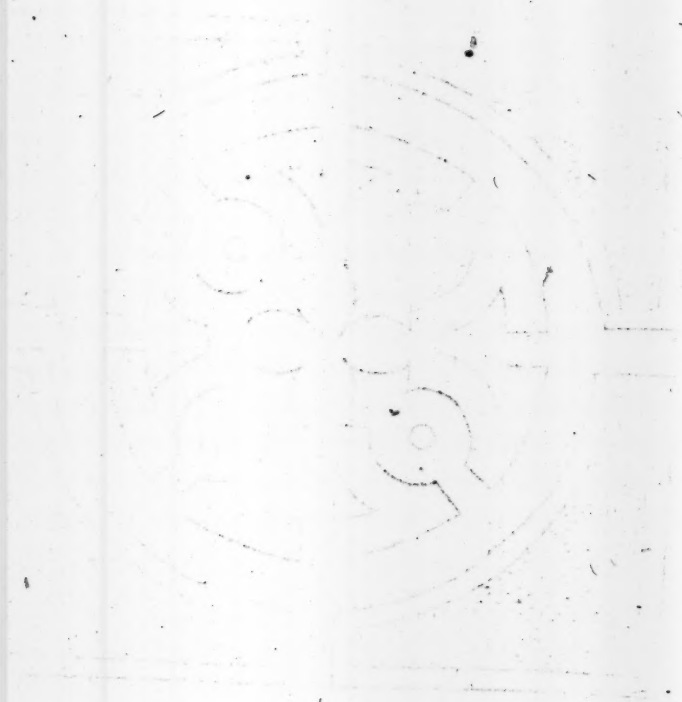


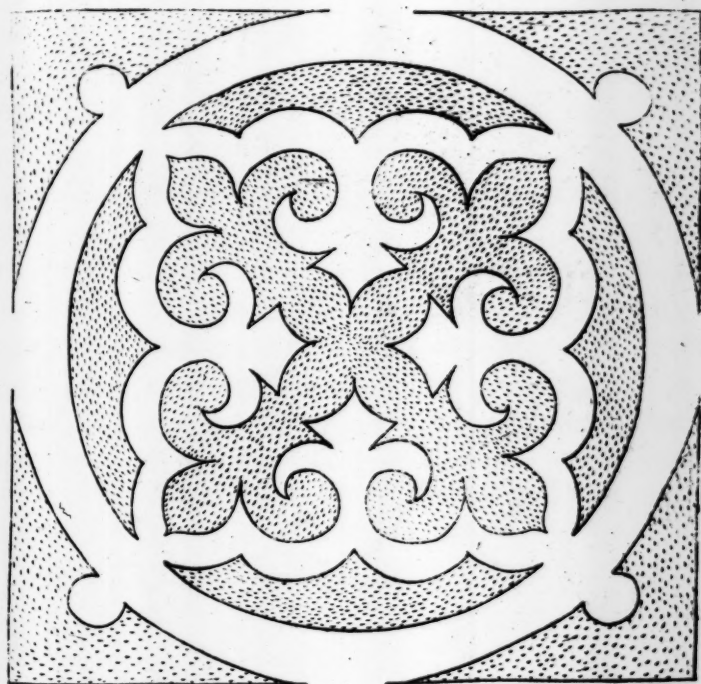




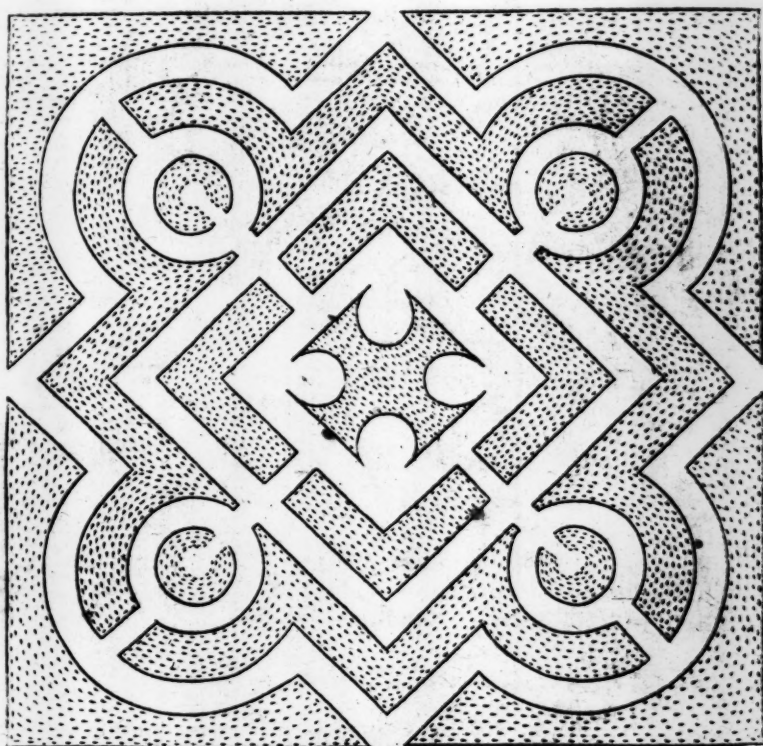






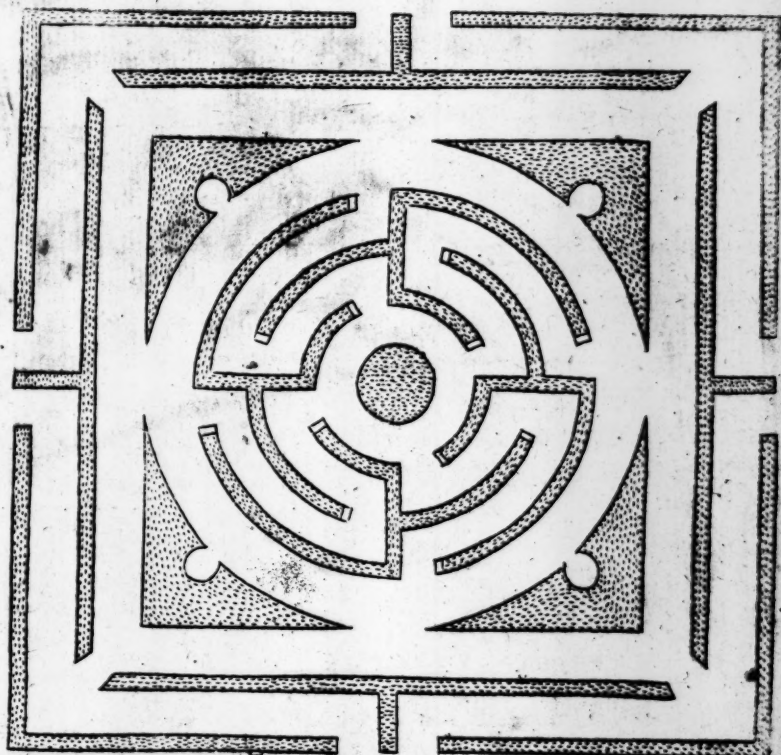






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